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A

VOYAGE

TO

SOUTH AMERICA.

DESCRIBING AT LARGE,

The SPANISH CITIES, TOWNS, PROVINCES, &c.
on that extenſive CONTINENT.

Undertaken by Command of the KING of SPAIN,

By Don GEORGE JUAN,

AND

Don ANTONIO DE ULLOA,

Both Captains of the SPANISH NAVY;

Fellows of the ROYAL SOCIETY of LONDON; Members of the
ROYAL ACADEMY at PARIS, &c. &c.

Tranſlated from the Original SPANISH.

THE THIRD EDITION:

To which are added,

By Mr. JOHN ADAMS, of WALTHAM-ABBEY,
who reſided ſeveral Years in thoſe Parts,

OCCASIONAL NOTES and OBSERVATIONS; an Account
of ſome Parts of the BRAZILS, hitherto unknown to the
ENGLISH NATION; and a MAP of SOUTH AMERICA
corrected.

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A VOYAGE TO SOUTH AMERICA.

BOOK VII.

Account of our Journey to LIMA; *with a Deſcription of the* TOWNS *and* SETTLEMENTS *on the Road, and of the City of* LIMA.

CHAP. I.

Journey from QUITO *to* TRUXILLO.

THE accidents to which human enterprizes and attempts are generally expoſed, direct, with an inconſtant, but wonderful harmony, the ſeries of our actions and adventures, and introduce among them a great variety of alterations and changes. It is this variety, which, in vegetation embelliſhes nature, and equally diſplays the glory and wiſdom of the ſupreme creator in the political and rational world; where we admire the ſurprizing diverſity of events, the infinity of human actions, and the different ſchemes and conſequences in politics, the ſucceſſive chain of which, renders hiſtory ſo delightful, and, to a reflecting mind, ſo inſtructive. The inconſtancy, ſo often ſeen in things the moſt ſolid and ſtable, is generally one of the moſt powerful obſtacles, to the advantages which might otherwiſe be derived from works of any duration. However great they are, either in reality, or idea, the perfection of them is not only impeded by the viciſſitudes of time, and the inconſtancy of things, but they even decline, and fall into ruins. Some, thro' want of proper ſupport and encouragement; while others, from the mind being wearied out by delays, difficulties, and a thouſand embarraſsments, are abandoned; the imagination being no longer able to purſue its magnificent ſcheme.

To meaſure ſome degrees of the Meridian near the equator, the principal intention of our voyage, if conſidered only in idea, and abſtractedly from the difficulties which attended its execution, muſt appear eaſy, and as requiring no great length of time; but experience convinced us, that a work of ſuch importance to the improvement of ſcience, and the intereſt of all nations, was not to be performed without delays, difficulties and dangers; which demanded attention, accuracy, and perſeverance. Beſides the difficulties neceſſarily attending the requiſite accuracy of theſe obſervations, the delays we were obliged to make in order to take them in the moſt favourable ſeaſons, the intervening clouds, the Paramos, and diſpoſition of the ground were ſo many obſtacles to our making any tolerable diſpatch; and theſe delays, filled us with apprehenſions, that if any other accidents ſhould happen, the whole deſign would be rendered abortive, or at leaſt, ſuffer a long interruption.

It has already been obſerved that while we were at Cuença, finiſhing our aſtronomical obſervations in that extremity of the arch of the Meridian, we un-

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expectedly received a letter from the marquis de Villa Garcia, vice-roy of Peru, deſiring us to come, with all ſpeed to his capital: any delay on our part might have been improper; and we were ſolicitous not to merit an accuſation of the leaſt remiſſneſs in his majeſty's ſervice. Thus we were under a neceſſity of ſuſpending our obſervations for ſome time *; though all that remained was the ſecond aſtronomical obſervation, northward, where the ſeries of our triangles terminated.

THE occaſion of this delay, aroſe from an account, received by the vice-roy, that war being declared between Spain and England, the latter was ſending a conſiderable fleet on ſome ſecret deſigns into thoſe ſeas. Several precautions had been taken to defeat any attempt; and the vice-roy, being pleaſed to conceive that we might be of ſome uſe to him in acquiting himſelf with honour on this occaſion, committed to us the execution of ſome of his meaſures; giving us to underſtand, that the choice he made of us, was the moſt convincing proof of the high opinion he entertained of our abilities; and indeed our obligations were the greater, as the diſtance of four hundred leagues had not obliterated us from his remembrance, of which he now gave us ſo honourable a proof.

ON the 24th of September, 1740, the vice-roy's letter was delivered to us, and we immediately repaired to Quito, in order to furniſh ourſelves with neceſſaries for the journey.

EVERY thing being performed, we ſet out from that city on the 30th of October, and determined to go by Guaranda and Guayaquil; for tho' there is a road by land thro' Cuença and Loja, yet the other ſeemed to us the moſt expeditious, as the ways are neither ſo bad, nor mules and other beaſts of carriage ſo difficult to be met with. The long ſtays in villages were

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* Vol. 1. Book V. Chap. II.

were here alſo little to be apprehended, which are frequently rendered neceſſary in the other road by inundations, rivers, and precipices.

On the 30th of October we reached the Bodegas, or warehouſes, of Babayoho, where taking a canoo we went down the river to Guayaquil; and embarking on board a ſmall ſhip bound for Puna, we anchored in that port November the 3d. At this place we hired a large balza, which brought us through the gulph to Machala. For though the uſual rout is by the Salto de Tumbez, we were obliged to alter our courſe, the pilot not being well acquainted with the entrance of a creek, thro' which you paſs to the Salto.

On the 5th in the morning our balza landed us on the coaſt of Machala, from whence we travelled by land to the town, the diſtance being about two ſhort leagues. The next day we ſent away our baggage in a large canoo to the Salto de Tumbez; going myſelf in the ſame canoo, being diſabled by a fall the preceding day. Don George Juan, with the ſervants, followed on horſeback: the whole country being level, is every where full of ſalt marſhes, and overflows at high water, ſo that the track is not ſufficient for two to go a-breaſt.

The Salto where I arrived on the 7th at night, is a place which ſerves as a kind of harbour for boats and ſmall veſſels. It is ſituated at the head of ſome creeks, particularly that of Jambeli, between fourteen and ſixteen leagues from the coaſt, but intirely deſtitute of inhabitants, no freſh water being found in any part of the adjacent country; ſo that it only ſerves for landing goods conſigned to Tumbez, where they are carried on mules, kept there for this purpoſe; and in this its whole trade conſiſts. The Salto is uninhabited; nor does it afford the leaſt ſhelter, all the goods brought thither being depoſited in a ſmall ſquare; and, as rain is ſeldom or never known here, there is little danger of their receiving any damage before they are carried to Tumbez.

Here, as along the ſides of all the creeks, the mangrove trees ſtand very thick, with their roots and branches ſo interwoven as to be abſolutely impenetrable; tho' the ſwarms of moſchetos are alone ſufficient to diſcourage any one from going among them. The only defence againſt theſe inſects is, to pitch a tent, till the beaſts are loaded, and you again move forward. The more inland parts, where the tides do not reach, are covered with foreſts of ſmaller trees, and contain great quantities of deer; but at the ſame time are infeſted with tigers; ſo that if the continual ſtinging of the moſchetos deprives travellers of their reſt, it alſo prevents their being ſurprized by the tigers, of the fury of which there are many melancholy examples.

On the 9th in the morning I arrived at the town of Tumbez, ſituated ſeven leagues from the Salto; the whole country through which the road lies is intirely waſte, part of it being overflowed by the tides, and the other part dead ſands, which reflect the rays of the ſun ſo intenſely, as to render it neceſſary in general to perform this journey in the night; for travelling ſeven leagues thither, and as many back without either water or fodder, is much too laborious for the mules to undergo in the day time. A drove of mules therefore never ſets out from Tumbez for the Salto, till an account arrives, generally by one of the ſailors belonging to the veſſel, of the goods being landed, and every thing in readineſs; as it would otherwiſe be loſt labour, it being impoſſible that the mules ſhould make any ſtay there.

Don George Juan had reached Tumbez on the 8th, and though he did every thing in his power to provide mules for continuing our journey, we were obliged to wait there ſome time longer. Nor could we make any advantage of our ſtay here, except to obſerve the latitude, which we did on the ninth with a quadrant, and found it to be 3° 13′ 16″ ſouth.

Near Tumbez, is a river of the ſame name, which diſcharges itſelf into the bay of Guayaquil, almoſt oppoſite to the iſland of St. Clare. Barks, boats, balzas, and canoos may go up and down this river, being three fathom deep, and twenty-five broad; but it is dangerous going up it in the winter ſeaſon, the impetuoſity of its current being then increaſed by torrents from the mountains. At a little diſtance from the cordillera, on one ſide of the banks of the river, ſtands the town of Tumbez in a very ſandy plain, interſperſed with ſome ſmall eminences. The town conſiſts only of ſeventy houſes, built of cane, and thatched, ſcattered up and down without any order or ſymmetry. In theſe houſes are about one hundred and fifty families of Meſtizos, Indians, Mulattoes, and a few Spaniards. There are beſides theſe other families living along the banks of the river, who having the conveniency of watering their grounds, continually employ themſelves in rural occupations.

The heat is exceſſive; nor have they here any rain for ſeveral years ſucceſſively; but when it begins to fall, it continues during the winter. The whole country from the town of Tumbez, to Lima, contained between the foot of the Cordillera and the ſea, is known by the name of Valles, which we mention here, as it will often occur in the remaining parts of this narrative.

Tumbez was the place where in the year 1526, the Spaniards firſt landed in theſe parts of South America, under the command of Don Franciſco Pizarro; and where he entered into ſeveral friendly conferences with the princes of the country, but vaſſals to the Yncas. If the Indians were ſurprized at the ſight of the Spaniards, the latter were equally ſo at the prodigious riches which they every where ſaw, and the largeneſs of the palaces, caſtles, and temples; of all of which, though built of ſtone, no veſtiges are now remaining.

ALONG the delightful banks of this river, as far as the water is conveyed, maize, and all other fruits and vegetables that are natives of a hot climate, are produced in the greateſt plenty. And in the more diſtant parts, which are deſtitute of this advantage, grows a kind of leguminous tree, called Algarrobale, producing a bean, which ſerves as food for all kinds of cattle. It reſembles almoſt that known in Spain by the name of Valencia; its pod being about five or ſix inches long, and only four lines broad, of a whitiſh colour, intermixed with veins of a faint yellow. It proves a very ſtrengthening food to beaſts of labour, and is uſed in fattening thoſe for the ſlaughter, which hence acquire a taſte remarkably delicious.

ON the 14th, I arrived at the town of Piura, where I was obliged to wait ſome time for Don George Juan, during which I entirely recovered from the indiſpoſition I before laboured under from my fall.

HERE I experienced the efficacy of the Calaguala; which I happily found not to fall ſhort of the great reputation it has acquired in ſeveral parts of Europe.

FROM the town of Tumbez, to the city of Piura, is 62 leagues, which we performed in 54 hours, excluſive of thoſe we reſted; ſo that the mules, which always travel one conſtant pace, go ſomething above a league an hour. To the town of Amotape, the only inhabited place in the whole road, is 48 leagues, the remaining part is one continued deſart. At leaving Tumbez, its river is croſſed in Balzas, after which for about two leagues the road lies through thickets of Algarrobale, and other trees, at the end of which the road runs along the ſea-coaſt to Mancora, 24 leagues from Tumbez. In order to travel this road, an opportunity at low-water muſt be taken for croſſing a place called Malpaſſo, about ſix leagues from Tumbez; for being a high ſteep rock, waſhed by the ſea during the flood, and the top of it impaſſable from the many chaſms and precipices, there is a neceſſity of paſſing between the ſea and its baſis, which is about half a league in length. And this muſt be done before the flood returns, which ſoon covers this narrow way, though it is very ſafe at low-water. During the remainder of this journey, it is equally neceſſary to conſult the tide, for the whole country being ſandy, the mules would, from their ſinking ſo deep in it, be tired the firſt league or two. Accordingly travellers generally keep along the ſhore, which being waſhed by the breaking of the waves, the ſand is more compact and firm; and conſequently much eaſier to the beaſts. During the winter, there runs thro' Mancora a ſmall rivulet of freſh water, to the great relief of the mules; but in ſummer the little remaining in its courſe is ſo brackiſh, that nothing but abſolute neceſſity can render it tolerable. The banks of this rivulet are ſo fertile by its water, that it produces ſuch numbers of large Algarrobales, as to form a ſhady foreſt.

From Mancora, the road for fourteen leagues runs between barren mountains, at ſome diſtance from the coaſt, with very troubleſome aſcents and declivities, as far as the breach of Parinnas; where the ſame cautions are to be obſerved as at Mancora, and is the ſecond ſtage; from whence the road lies over a ſandy plain, ten leagues in length, to the town of Amotape, and at ſome diſtance from the coaſt.

This town, which ſtands in 4° 51′ 43″ South latitude, is an appendix to the Pariſh of Tumbez, belonging to its lieutenancy, and in the juriſdiction of Piura. The houſes are about 30 in number, and compoſed of the ſame materials with thoſe of Tumbez; but the inhabitants are only Indians and Meſtizos. A quarter of a league from it is a river of the ſame name, and whoſe waters are of ſuch prodigious uſe to the country, that it is every where cultivated, and divided into fields, producing plenty of the ſeveral grains, eſculent vegetables, and fruits, natural to a hot climate; but like Tumbez, is infeſted with Moſchetos. This river in ſummer may be forded; but in winter, when the torrents deſcend from the mountains, it muſt be croſſed in a balza, the rapidity of its current being then conſiderably increaſed. There is a neceſſity for paſſing it in going to Piura, and after this for about four leagues the road lies through woods of lofty Algarrobales. Theſe woods terminate on a ſandy plain, where even the moſt experienced drivers and Indians ſometimes loſe their way, the wind levelling thoſe hills of ſand, which ſerved as marks, and effacing all the tracks formerly made: ſo that in travelling this country, the only direction is the ſun in the day time, and the ſtars in the night; and the Indians being little acquainted with the ſituation of theſe objects, are often bewildered, and expoſed to the greateſt hardſhips, before they can again find their way.

From what has been ſaid, the difficulties of travelling this road may be conceived. Beſides as far as Amotape, not only all kinds of proviſions muſt be carried, but even water, and the requiſites for kindling a fire, unleſs your proviſion conſiſts of cold meat. In this laſt ſtage is a mine of cope, a kind of mineral tar, great quantities of which are carried to Callao, and other ports, being uſed in ſhips inſtead of naphtha, but has the ill quality of burning the cordage; its cheapneſs however induces them to uſe it mixed with naphtha.

The city of Piura, which is at preſent the capital of its juriſdiction, was the firſt Spaniſh ſettlement in Peru. It was founded in the year 1531 by Don Franciſco Pizarro, who alſo built the firſt church in it. This city was originally called San Miguel de Piura, and ſtood in the valley of Targaſala, from whence, on account of the badneſs of the air, it was removed to its preſent ſituation, which is on a ſandy plain. The latitude of it is 5° 11′ 1″ South, and the variation of the needle we obſerved to be 8° 13′ Eaſterly. The houſes are either of bricks dried in the ſun, or a kind of reeds called Quinchas, and few of them have any ſtory. Here the Corregidor reſides, whoſe juriſdiction extends on one ſide along Valles, and on the other among the mountains. Here is an office for the royal revenue, under an accomptant or treaſurer, who relieve each other every ſix months, one reſiding at the port of Paita, and the other in this place: At the former for receiving the duties on imports for goods landed there, and alſo for preventing a contraband trade; and at the latter for receiving the revenues and merchandizes on goods conſigned from the mountains to Loja; or going from Tumbez to Lima.

This city contains near fifteen hundred inhabitants; and among theſe ſome families of rank, beſides other Spaniards, Meſtizos, Indians, and Mulattoes. The climate is hot and very dry, rains being ſeldomer known here than at Tumbez: notwithſtanding which it is very healthy. It has a river of great advantage to the inhabitants as well as the adjacent country, the ſoil of which is ſandy, and therefore eaſier penetrated by the water; and being level, the water is conveyed to different parts by canals. But in the ſummer the river is abſolutely deſtitute of water, the little which deſcends from the mountains being abſorbed before it reaches the city; ſo that the inhabitants have no other method of procuring water, but by digging wells in the bed of the river, the depth of which muſt be proportioned to the length of time the drought has continued.

Piura has an hoſpital under the care of the Bethlemites; and tho' patients afflicted with all kinds of diſtempers are admitted, it is particularly famous for the cure of the French diſeaſe, which is not a little forwarded by the nature of the climate. Accordingly there is here a great reſort of perſons infected with that infamous diſtemper; and are reſtored to their former health by a leſs quantity of the ſpecific than is uſed in other countries, and alſo with greater eaſe and expedition.

As the whole territory of this juriſdiction within Valles produces only the Algarroba, maize, cotton, grain, a few fruits and eſculent vegetables, moſt of the inhabitants apply themſelves to the breeding of goats, great numbers of which are continually ſold for ſlaughter, and from their fat they make ſoap, for which they are ſure of a good market at Lima, Quito, and Panama; their ſkins are dreſſed into leather called Cardovan, and for which there is alſo a great demand at the above cities. Another branch of its commerce is the Cabuya, or Pita, a kind of plant from whence a very fine and ſtrong thread is made; and which abounds in the mountainous parts of its juriſdiction. Great advantages are alſo made from their mules, as all the goods ſent from Quito to Lima, and alſo thoſe coming from Spain, and landed at the port of Paita, cannot be forwarded to the places they are conſigned to but by the mules of this province; and from the immenſe quantity of goods coming from all parts, ſome idea may be formed of the number of beaſts employed in this trade, which continues more or leſs throughout the year; but is prodigious when the rivers are ſhallow.

DON GEORGE JUAN being arrived at Piura, every thing was got ready with the utmoſt diſpatch, and on the 21ſt we continued our journey The next day we reached the town of Sechura, ten leagues diſtant from Piura, according to the time we were travelling it. The whole country between theſe two places is a level ſandy deſart.

Though the badneſs and danger of the roads in Peru ſcarce admit of any other method of travelling than on mules, yet from Piura to Lima there is a conveniency of going in litters. Theſe inſtead of poles are ſuſpended on two large canes, like thoſe of Guayaquil, and are hung in ſuch a manner as not to touch the water in fording rivers, nor ſtrike againſt the rocks in the aſcents or deſcents of difficult roads.

As the mules hired at Piura perform the whole journey to Lima, without being relieved, and in this great diſtance, are many long deſarts to be croſſed, the natural fatigue of the diſtance, increaſed by the ſandineſs of the roads, render ſome intervals of reſt abſolutely neceſſary, eſpecially at Sechura, becauſe on leaving that town we enter the great deſart of the ſame name. We tarried here two days; during which we obſerved the latitude, and found it 5° 32′ 33 ½″ S.

The original ſituation of this town was contiguous to the ſea, at a ſmall diſtance from a point called Aguja; but being deſtroyed by an inundation, it was thought proper to build the preſent town of Sechura about a league diſtance from the coaſt, near a river of the ſame name, and which is ſubject to the ſame alterations as that of Piura; for at the time we croſſed it no water was to be ſeen; whereas from the months of February or March till Auguſt or September, its water is ſo deep and the current ſo ſtrong, as to be paſſed only in balzas; as we found in our ſecond and third journey to Lima. When the river is dry, the inhabitants make uſe of the above-mentioned expedient of digging wells in its beds, where they indeed find water but very thick and brackiſh. Sechura contains about 200 houſes of cane, and a large and handſome brick church; the inhabitants are all Indians, and conſiſt of near 400 families, who are all employed either as drivers of the mules or fiſhermen. The houſes of all theſe towns are quite ſimple; the walls conſiſting only of common canes and reeds, fixed a little way in the ground, with flat roofs of the ſame materials, rain being hardly ever known here; ſo that they have ſufficient light and air, both the rays of the ſun and wind eaſily finding a paſſage. The Indian inhabitants of this place uſe a different language from that common in the other towns both of Quito and Peru; and this is frequently the caſe in great part of Valles. Nor is it only their language which diſtinguiſhes them, but even their accent; for beſides their enunciation, which is a kind of melancholy ſinging, they contract half of their laſt words, as if they wanted breath to pronounce them.

The dreſs of the Indian women in theſe parts, conſiſts only of an Anaco, like that of the women of Quito, except its being of ſuch a length as to trail upon the ground. It is alſo much larger, but without ſleeves, nor is it tied round them with a girdle. In walking they take it up a little, and hold it under their arms. Their head dreſs conſiſts of cotton cloth laced or embroidered with different colours; but the widows wear black. The condition of every one may be known by their manner of dreſſing their hair, maids and widows dividing it into two platted locks, one hanging on each ſhoulder, whilſt married women braid all their hair in one. They are very induſtrious, and uſually employed in weaving napkins of cotton and the like. The men dreſs in the Spaniſh manner; and conſequently wear ſhoes; but the women none. They are naturally haughty, of very good underſtandings, and differ in ſome cuſtoms from thoſe of Quito. They are a proof of what has been obſerved (Book VI. Chap. VI. vol. 1.) with regard to the great improvement they receive from a knowledge of the Spaniſh language; and accordingly it is ſpoken here as fluently as their own. They have genius, and generally ſucceed in whatever they apply themſelves to. They are neither ſo ſuperſtitious, nor ſo exceſſively given to vice as the others; ſo that except in their colour and other natural appearances, they may be ſaid to differ greatly from them; and even in their propenſity to intemperance, and other popular cuſtoms of the Indians, a certain moderation and love of order is conſpicuous among theſe. But to avoid tedious repetitions, I ſhall conclude with obſerving, that all the Indians of Valles from Tumbez to Lima are induſtrious, intelligent, and civilized beyond what is generally imagined.

The town of Sechura is the laſt in the juriſdiction of Piura, and its inhabitants not only refuſe to furniſh paſſengers with mules, but alſo will not ſuffer any perſon of whatever rank, to continue his journey, without producing the Corregidor's paſſport. The intention of this ſtrictneſs is to ſuppreſs all abuſes in trade; for there being beſides this road which leads to the deſart, only one other called the Rodeo; one of them muſt be taken; if that of the deſart, mules muſt be hired at Sechura for carrying water for the uſe of the loaded mules when they have performed half their journey. This water is put into large callebaſhes, or ſkins, and for every four loaded mules one mule loaded with water is allowed, and alſo one for the two mules carrying the litter. When they travel on horſeback, the riders carry their water in large bags or wallets made for that purpoſe; and every one of the paſſengers, whether in the litter or on horſeback, provides himſelf with what quantity he thinks ſufficient, as during the whole journey nothing is ſeen but ſand and hills of it formed by the wind, and here and there maſſes of ſalt; but neither ſprig, herb, flower, or any other verdure.

ON the 24th we left Sechura, and croſſed the deſart, making only ſome ſhort ſtops for the eaſe of our beaſts, ſo that we arrived the next day at five in the evening at the town of Morrope, 28 or 30 leagues diſtance from Sechura, tho' falſly computed more by the natives. The extent and uniform aſpect of this plan, together with the continual motion of the ſand which ſoon effaces all tracks, often bewilders the moſt experienced guides, who however ſhew their ſkill in ſoon recovering the right way; for which they make uſe of two expedients: 1ſt, to obſerve to keep the wind directly in their face; and the reverſe upon their return; for the ſouth winds being conſtant here, this rule cannot deceive them: 2d, to take up a handful of ſand at different diſtances, and ſmell to it; for as the excrements of the mules impregnate the ſand more or leſs, they determine which is the true road by the ſcent of it. Thoſe who are not well acquainted with theſe parts, expoſe themſelves to great danger, by ſtopping to reſt or ſleep; for when they again ſet forward, they find themſelves unable to determine the right road; and when they once have loſt the true direction, it is a remarkable inſtance of Providence if they do not periſh with fatigue or diſtreſs, of which there are many melancholy inſtances.

THE town of Morrope conſiſts of between 70 and 80 houſes, built like thoſe in the preceeding towns; and contains about 160 families, all Indians. Near it runs a river called Pozuelos, ſubject to the ſame changes as thoſe above-mentioned; though the lands bordering on its banks are cultivated, and adorned with trees. The inſtinct of the beaſts uſed to this road is really ſurprizing; for even at the diſtance of four leagues, they ſmell its water, and become ſo impatient that it would be difficult to ſtop them; accordingly they purſue themſelves the ſhorteſt road, and perform the remainder of the journey with remarkable chearfulneſs and diſpatch.

On the 26th we left Morrope, and arrived at Lambayeque, four leagues from it: and being obliged to continue there all the 27th, we obſerved its latitude, and found it 6° 41′ 37″ S. This place conſiſts of about 1500 houſes, built ſome of bricks, others of bajareques, the middle of the walls being of cane, and plaiſtered over, both on the inſide and outſide with clay: the meaneſt conſiſts entirely of cane, and are the habitations of the Indians. The number of inhabitants amount to about 3000, and among them, ſome conſiderable and opulent families; but the generality are poor Spaniards, Mulattoes, Meſtizos, and Indians. The pariſh church is built of ſtone, large and beautiful, and the ornaments ſplendid. It has four chapels called Ramos, with an equal number of prieſts, who take care of the ſpiritual concerns of the Indians, and alſo attend, by turns, on the other inhabitants.

The reaſon why this town is ſo populous is, that the families which formerly inhabited the city of Sana, on its being ſacked in 1685, by Edward Davis, an Engliſh adventurer, removed hither; being under a farther neceſſity of changing their dwelling from a ſudden inundation of the river of the ſame name, by which every thing that had eſcaped the ravages of the Engliſh, was deſtroyed. It is the reſidence of a Corregidor, having under his juriſdiction, beſides many other towns, that of Morrope. One of the two officers of the revenue appointed for Truxillo, reſides here. A river called Lambayeque, waſhes this place; which, when the waters are high, as they were when we arrived here, is croſſed over a wooden bridge; but at other times may be forded, and often is quite dry.

The neighbourhood of Lambayeque, as far as the induſtry of its inhabitants have improved it, by canals cut from the river, abounds in ſeveral kinds of vegetables and fruits; ſome of the ſame kind with thoſe known in Europe, and others of the Creole kind, being European fruits planted there, but which have undergone conſiderable alterations from the climate. About ten leagues from it are eſpaliers of vines, from the grapes of which they make wine, but neither ſo good, nor in ſuch plenty as in other parts of Peru. Many of the poor people here employ themſelves in works of cotton, as embroidered handkerchiefs, quilts, mantelets, and the like.

On the 28th we left Lambayeque, and having paſſed thro' the town of Monſefu, about four or five leagues diſtant from it, we halted near the ſea coaſt, at a place called Las Lagunas, or the Fens; theſe containing freſh water left in them by the overflowings of the River Sana. On the 29th we forded the river Xequetepeque, leaving the town of that name at the diſtance of about a quarter of a league, and in the evening arrived at the town of St. Pedro, twenty leagues from Lambayeque, and the laſt place in its juriſdiction. By obſervation we found its latitude to be 7° 25′ 49″ S.

St. Pedro conſiſts of about 130 baxaraque houſes, and is inhabited by 120 Indian families, 30 of Whites and Meſtizos, and 12 of Mulattoes. Here is a convent of Auguſtines, tho' it ſeldom conſiſts of above three perſons, the prior, the prieſt of the town, and his curate. Its river is called Pacaſmayo, and all its territories produce grain and fruits in abundance. A great part of the road from Lambayeque to St. Pedro, lies along the ſhore, not indeed at an equal, but never at a great diſtance from it.

On the 30th of November we paſſed through the town of Payjan, which is the firſt in the juriſdiction of Truxillo, and on the firſt of December we reached that of Chocope, 13 or 14 leagues diſtant from

St. Pedro. We found its latitude to be 7° 46′ 40″ S. The adjacent country being watered by the river called Chicama, diſtributed to it by canals, produces the greateſt plenty of ſugar canes, grapes, fruits of different kinds, both European and Creole: and particularly maize, which is the general grain uſed in all Valles. From the banks of the river Lambayeque to this place, ſugar canes flouriſh near all the other rivers, but none of them equal, either in goodneſs or quantity, thoſe near the river Chicama.

Chocope conſiſts of betwixt 80 and 90 baxareque houſes, covered with earth. The inhabitants, who are between 60 and 70 families, are chiefly Spaniards, with ſome of the other caſts; but not above 20 or 25 of Indians. Its church is built of bricks, and both large and decent. They report here, as ſomething very remarkable, that in the year 1726, there was a continual rain of 40 nights, beginning conſtantly at four or five in the evening, and ceaſing at the ſame hour next morning, the ſky being clear all the reſt of the day. This unexpected event, intirely ruined the houſes, and even the brick church, ſo that only ſome fragments of its walls remained. What greatly aſtoniſhed the inhabitants was, that during the whole time the ſoutherly winds not only continued the ſame, but blew with ſo much force, that they raiſed the ſand, tho' thoroughly wet. Two years after a like phænomenon was ſeen for about eleven or twelve days, but was not attended with the ſame deſtructive violence as the former. Since which time nothing of this kind has happened, nor had any thing like it been remembered for many years before.

CHAP.

CHAP. II.

Our arrival at TRUXILLO; *a Deſcription of that City, and the Continuance of our Journey to* LIMA.

WITHOUT ſtaying any longer at Chocope than is uſual for reſting the beaſts, we continued our journey, and arrived at the city of Truxillo, 11 leagues diſtant, and, according to our obſervations, in 8° 6′ 3″ S. latitude. This city was built in the year 1535, by Don Franciſco Pizarro, in the valley of Chimo. Its ſituation is pleaſant, notwithſtanding the ſandy ſoil, the univerſal defect of all the towns in Valles. It is ſurrounded by a brick wall, and its circuit entitles it to be claſſed among cities of the third order. It ſtands about half a league from the ſea, and two leagues to the northward of it is the port of Guanchaco, the channel of its maritime commerce. The houſes make a creditable appearance. The generality are of bricks, decorated with ſtately balconies, and ſuperb porticos; but the other of baxareques. Both are however low, on account of the frequent earthquakes; few have ſo much as one ſtory. The corregidor of the whole department reſides in this city; and alſo a biſhop (whoſe dioceſe begins at Tumbez) with a chapter conſiſting of three dignitaries, namely, the dean, arch-deacon, and chanter; four canons, and two prebendaries. Here is an office of revenue, conducted by an accomptant and treaſurer; one of whom, as I have already obſerved, reſides at Lambayeque. Convents of ſeveral orders are eſtabliſhed here; a college of Jeſuits, an hoſpital of our lady of Bethlehem, and two nunneries, one of the order of St. Clare, and the other of St. Tereſa.

THE inhabitants conſiſt of Spaniards, Indians, and all the other caſts. Among the former are ſeveral very rich and diſtinguiſhed families. All in general are very civil and friendly, and regular in their conduct. The women in their dreſs and cuſtoms follow nearly thoſe of Lima, an account of which will be given in the ſequel. Great number of chaiſes are ſeen here, there not being a family of any credit without one; as the ſandy ſoil is very troubleſome in walking.

In this climate, there is a ſenſible difference between winter and ſummer, the former being attended with cold, and the latter with exceſſive heat. The country of this whole valley is extreamly fruitful, abounding with ſugar canes, maize, fruits, and garden ſtuff; and with vineyards and olive yards. The parts of the country neareſt the mountains produce wheat, barley, and other grain; ſo that the inhabitants enjoy not only a plenty of all kinds of proviſions, but alſo make conſiderable exports to Panama, eſpecially of wheat and ſugars. This remarkable fertility has been improved to the great embelliſhment of the country; ſo that the city is ſurrounded by ſeveral groves, and delightful walks of trees. The gardens alſo are well cultivated, and make a very beautiful appearance; which with a continual ſerene ſky, prove not leſs agreeable to travellers than to the inhabitants.

About a league from the city is a river, whoſe waters are conducted by various canals, through this delightful country. We forded it on the 14th when we left Truxillo; and on the 5th, after paſſing thro' Moche, we came to Biru, ten leagues from Truxillo. The paſs of the corregidor of Truxillo muſt be produced to the alcade of Moche, for without this, as before at Sechura, no perſon would be admitted to continue his journey.

Biru, which lies in 8° 24′ 59″ S. latitude, conſiſts of 50 baxareque houſes, inhabited by 70 families of Spaniards, Indians, Mulattoes, and Meſtizos.

About half a league to the northward of it, is a rivulet, from which are cut ſeveral trenches, for watering the grounds. Accordingly the lands are equally fertile with thoſe of Truxillo, and the ſame may be ſaid of the other ſettlements farther up the river. This place we left the ſame day, travelling ſometimes along the ſhore, ſometimes at a league diſtance from it.

ON the 6th we halted in a deſart place called Tambo de Chao, and afterwards came to the banks of the river Santa; which having paſſed by means of the Chimbadores, we entered the town of the ſame name, which lies at about a quarter of a league from it, and 15 from Biru. The road being chiefly over vaſt ſandy plains, intercepted between two hills.

THE river Santa, at the place where it is uſually forded, is near a quarter of a league in breadth, forming five principal ſtreams, which run during the whole year with great rapidity. It is always forded, and for this purpoſe perſons make it their buſineſs to attend with very high horſes, trained up to ſtem the current, which is always very ſtrong. They are called Chimbadores; and muſt have an exact knowledge of the fords, in order to guide the loaded mules in their paſſage, as otherwiſe the fording this river would be ſcarce practicable, the floods often ſhifting the beds of the river; ſo that even the Chimbadores themſelves are not always ſafe: for the fords being ſuddenly changed in one of the ſtreams, they are carried out of their depth by the current, and irretrievably loſt. During the winter ſeaſon, in the mountains, it often ſwells to ſuch a height, as not to be forded for ſeveral days, and the paſſengers are obliged to wait the fall of the waters, eſpecially if they have with them any goods; for thoſe who travel without baggage may, by going ſix or eight leagues above the town, paſs over it on balzas made of calabaſhes: tho' even here not without danger, for if the balza happens to meet any ſtrong current, it is ſwept away by its rapidity, and carried into the ſea. When we forded it, the waters were very low, notwithſtanding which, we found from three ſeveral experiments made on its banks, that the velocity of the current was 35 toiſes in 29 ½ ſeconds; ſo that the current runs 4271 toiſes, or a league and an half in an hour. This velocity does not indeed equal what M. de la Condamine mentions in the narrative of his voyage down the river Maragnon, or that of the Amazones, at the Pango, or ſtreight of Manceriche. But, doubtleſs, when the river of Santa is at its uſual height, it exceeds even the celerity of the Pango; at the time of making our obſervations, it was at its loweſt.

The latitude of the town of Santa Miria de la Parrilla, for ſo it is alſo called, we determined by an obſervation of ſome ſtars, not having an opportunity of doing it by the ſun, and found it 8° 57′ 36″ S. It was firſt built on the ſea coaſt, from which it is now ſomething above half a league diſtant. It was large, populous, the reſidence of a Corregidor, and had ſeveral convents. But in 1685, being pillaged and deſtroyed by the above-mentioned Engliſh adventurer, its inhabitants abandoned it, and ſuch as were not able to remove to a place of greater ſecurity, ſettled in the place where it now ſtands. The whole number of houſes in it at preſent does not exceed thirty; and of theſe the beſt are only of baxareque, and the others of ſtraw. Theſe houſes are inhabited with about 50 poor families conſiſting of Indians, Mulattoes, and Meſtizos.

During our obſervations, we were entertained with a ſight of a large ignited exhalation, or globe of fire in the air, like that mentioned in the firſt volume of this work, tho' not ſo large, and leſs effulgent. Its direction was continued for a conſiderable time towards the weſt, till having reached the ſea coaſt, it diſappeared with an exploſion like that of cannon. Thoſe who had not ſeen it were alarmed, and imagining it to be a cannon fired by ſome ſhip arrived in the port, ran to arms, and haſtened on horſeback to the ſhore, in order to oppoſe the landing of the enemy. But finding all quiet, they returned to the town, only leaving ſome centinels to ſend advice, if any thing extraordinary ſhould happen. Theſe igneous phænomena are ſo far from being uncommon all over Valles, that they are ſeen at all times of the night, and ſome of them remarkably large, luminous, and continuing a conſiderable time.

THIS town and its neighbourhood are terribly infeſted with Moſchitos. There are indeed ſome parts of the year when their numbers decreaſe, and ſometimes, though very ſeldom, none are to be ſeen; but they generally continue during the whole year. The country from Piura upwards is free from this troubleſome inſect, except ſome particular towns, ſituated near rivers; but they ſwarm no where in ſuch intolerable numbers as at Santa.

LEAVING this town on the 8th, we proceeded to Guaca-Tambo, a plantation ſo called, eight leagues diſtance from Santa, and contiguous to it is the Tambo, an inn built by the Yncas for the uſe of travellers. It has a ſhed for the convenience of paſſengers, and a rivulet running near it.

ON the 9th we came to another plantation known by the name of Manchan, within a league of which we paſſed through a village called Caſma la Baxa, having a church, with not more than ten or twelve houſes. Half way betwixt this and Manchan is another rivulet. The latter plantation is about eight leagues diſtant from the former. From Manchan on the tenth we travelled over thoſe ſtony hills called the Culebras, extremely troubleſome, particularly to the litters, and on the following day being the 11th, we entered Guarmey, 16 leagues from Manchan; and after travelling about three leagues further we reached the Paſcana, or reſting place, erected inſtead of a Tambo or inn, and called the Tambo de Culebras. The town of Guarmey is but ſmall and inconſiderable, conſiſting only of 40 houſes, and theſe no better than the preceding. They are inhabited by about 70 families, few of which are Spaniards. Its latitude is 10° 3′ 53″ S. The corregidor has obtained leave to reſide here continually, probably to be free from the intolerable plague of the Moſchitos at Santa, where formerly was his reſidence.

On the 13th we proceeded from hence to a place called Callejones, travelling over 13 leagues of very bad road, being either ſandy plains, or craggy eminences. Among the latter is one, not a little dangerous, called Salto del Frayle, or the Friar's leap. It is an entire rock, very high, and, towards the ſea, almoſt perpendicular. There is however no other way, tho' the precipice cannot be viewed without horror; and even the mules themſelves ſeem afraid of it by the great caution with which they take their ſteps. On the following day we reached Guamanmayo, a hamlet at ſome diſtance from the river Barranca, and belonging to the town of Pativirca, about eight leagues from the Callejones. This town is the laſt in the juriſdiction of Santa or Guarmey

Patavirca conſiſts only of 50 or 60 houſes, and a proportional number of inhabitants; among whom are ſome Spaniſh families, but very few Indians. Near the ſea coaſt, which is about three quarters of a league from Guamanmayo, are ſtill remaining ſome huge walls of unburnt bricks; being the ruins of an ancient Indian ſtructure; and its magnitude confirms the tradition of the natives, that it was one of the palaces of the ancient caſeques, or princes; and doubtleſs its ſituation is excellently adapted to that purpoſe, having on one ſide a moſt fertile and delightful country, and on the other, the refreſhing proſpect of the ſea.

On the 15th we proceeded to the banks of the river Barranca, about a quarter of a league diſtant. We eaſily forded it, under the direction of Chimbadores. It was now very low, and divided into three branches, but being full of ſtones is always dangerous. About a league further is the town of Barranca, where the juriſdiction of Guaura begins. The town is populous, and many of its inhabitants, Spaniards, tho' the houſes do not exceed 60 or 70. The ſame day we reached Guaura, which from Guamanmayo, makes a diſtance of nine leagues.

This town conſiſts only of one ſingle ſtreet, about a quarter of a league in length, and contains about 150 or 200 houſes; ſome of which are of bricks, others of baxareques; beſides a few Indian huts.

This town has a pariſh church, and a convent of Franciſcans. Near it you paſs by a plantation, extending above a league on each ſide of the road, which is every where extremely delightful; the country eaſtward, as far as the eye can reach, being covered with ſugar-canes, and weſtward divided into fields of corn, maize, and other ſpecies of grain. Nor are theſe elegant improvements confined to the neighbourhood of the town, but the whole valley, which is very large, makes the ſame beautiful appearance.

At the South-end of the town of Guaura, ſtands a large tower, with a gate, and over it, a kind of redoubt. This tower is erected before a ſtone bridge, under which runs Guaura river; and ſo near to the town that it waſhes the foundations of the houſes, but without any damage, being a rock. From the river is a ſuburb which extends above half a league, but the houſes are not contiguous to each other; and the groves and gardens with which they are intermixed, render the road very pleaſant. By a ſolar obſervation, we found the latitude of Guaura to be 11° 3′ 36″ S. The ſky is clear, and the temperature of the air healthy and regular. For though it is not without a ſenſible difference in the ſeaſons, yet the cold of the winter, and the heats of ſummer are both eaſily ſupportable.

In proceeding on our journey from Guarmey we met with a great many remains of the edifices of the Yncas. Some were the walls of palaces; others, as it were large dykes, by the ſides of ſpacious highways; and others fortreſſes, or caſtles, properly ſituated for checking the inroads of enemies. One of the latter monuments ſtands about 2 or 3 leagues North of Pativirca, not far from a river. It is the ruins of a fort, and ſituated on the top of an eminence at a ſmall diſtance from the ſea; but the veſtiges only of the walls are now remaining.

From Guaura we came to the town of Chancay; and though the diſtance between this is reckoned only twelve leagues, we concluded, by the time we were travelling it to be at leaſt fourteen. From an obſervation we found its latitude 11° 33′ 47″ S. The town conſiſts of about 300 houſes, and Indian huts; is very populous, and among other inhabitants can boaſt of many Spaniſh families, and ſome of diſtinguiſhed rank. Beſides its pariſh church, here is a convent of the order of St. Francis, and an hoſpital chiefly ſupported by the benevolence of the inhabitants. It is the capital of the juriſdiction of its name, and belongs to that of Guaura. The Corregidor, whoſe uſual reſidence is at Chancay, appoints a deputy for Guaura. The adjacent country is naturally very fertile, and every where well watered by canals cut from the river Paſſamayo, which runs about a league and a half to the Southward of the town. Theſe parts are every where ſowed with maize, for the purpoſe of fattening hogs, in which article is carried on a very conſiderable trade; the city of Lima being furniſhed from hence.

We left Chancay the 17th; and after travelling a league beyond the river Paſſamayo, which we forded, arrived at the Tambo of the ſame name, ſituated at the foot of a mountain of ſand, exceeding troubleſome, both on account of its length, ſteepneſs, and difficulty in walking; ſo that it is generally paſſed in the night, the ſoil not being then ſo fatiguing.

FROM thence on the 18th we reached Tambo de Ynca, and after travelling 12 leagues from the town of Chancay, we had at length the pleaſure of entering the city of Lima.

FROM the diſtances carefully ſet down during the whole courſe of the journey, it appears that from Tumbez to Piura is 62 leagues; from Piura to Truxillo 89, and from Truxillo to Lima 113; in all 264 leagues. The greateſt part of this long journey is generally performed by night; for the whole country being one continued ſand, the reflection of the ſun's rays is ſo violent, that the mules would be overcome by the heat; beſides the want of water, herbage, and the like. Accordingly the road all along, is rather diſtinguiſhed by the bones of the mules, which have ſunk under their burdens, than by any track or path. For notwithſtanding they are continually paſſing and re-paſſing throughout the whole year, the winds quickly efface all the prints of their feet. This country is alſo ſo bare, that when a ſmall herb or ſpring happens to be diſcovered, it is a ſure ſign of being in the neighbourhood of houſes. For theſe ſtand near rivers, the moiſture of which fertilizes theſe arid waſtes, ſo that they produce that verdure not to be ſeen in the uninhabited parts, as they are ſuch, merely from their being deſtitute of water; without which no creature can ſubſiſt, nor any lands be improved.

IN the towns we met with plenty of all neceſſary proviſions; as fleſh, fowl, bread, fruits, and wine; all extreamly good, and at a reaſonable price; but the traveller is obliged to dreſs his meat himſelf, if he has not ſervants of his own to do it for him; for in the greateſt parts of the towns he will not meet with any one, inclinable to do him that piece of ſervice, except in the larger cities where the maſters of inns furniſh the table. In the little towns, the inns, or rather lodging-houſes, afford nothing but ſhelter; ſo that travellers are not only put to the inconvenience of carrying water, wood and proviſions from one town to another, but alſo all kinds of kitchen utenſils. Beſides tame fowl, pigeons, peacocks and geeſe, which are to be purchaſed in the meaneſt towns, all cultivated parts of this country abound in turtle doves, which live intirely on maize and the ſeeds of trees, and multiply exceedingly; ſo that ſhooting them, is the uſual diverſion of travellers while they continue in any town; but except theſe, and ſome ſpecies of ſmall birds, no others are to be had during the whole journey. On the other hand, no ravenous beaſts, or venomous reptiles are found here.

The diſtribution of waters by means of canals, which extend the benefit of the rivers to diſtant parts of the country, owes its origin to the royal care and attention of the Yncas; who among other marks of their zeal for promoting the happineſs of their ſubjects, taught them by this method, to procure from the earth, whatever was neceſſary either for their ſubſiſtance, or pleaſure. Among theſe rivers, many are entirely dry or very low, when the waters ceaſe to flow from the mountains; but others, as thoſe of Santa Baranca, Guaura, Paſſamayo, and others, continue to run with a full ſtream during the greateſt drought.

The uſual time when the water begins to increaſe in theſe rivers is the beginning of January or February, and continues till June, which is the winter among the mountains; and, on the contrary, the ſummer in Valles; in the former it rains, while in the latter the ſun darts a violent heat, and the ſouth winds are ſcarce felt. From June the waters begin to decreaſe, and in November or December the rivers are at their loweſt ebb, or quite dry; and this is the winter ſeaſon in Valles, and the ſummer in the mountains. So remarkable a difference is there in the temperature of the air, tho' at ſo ſmall a diſtance.

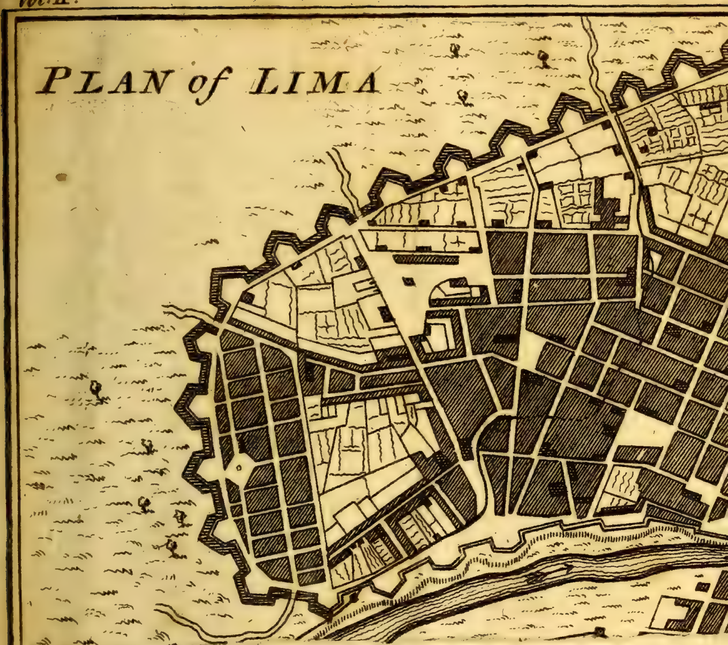
CHAP. III.

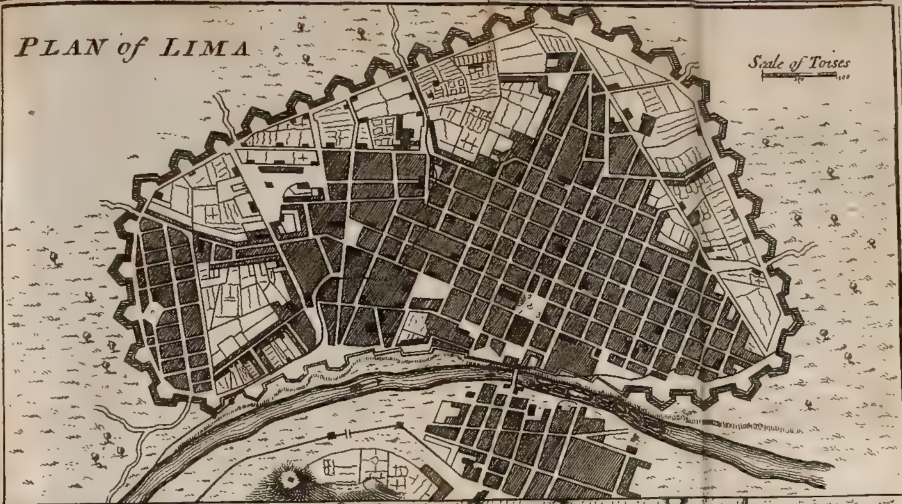
Account of the City of LIMA, *the Capital of* PERU.

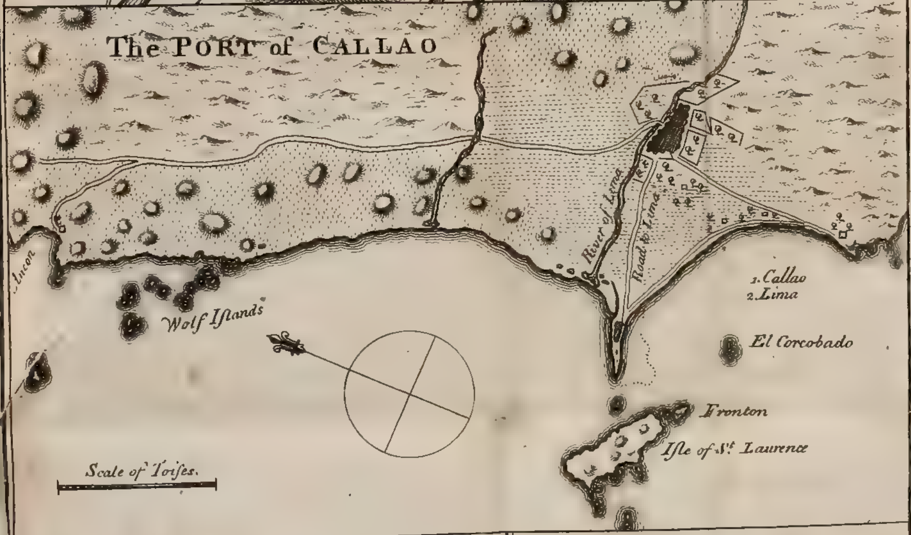
FORTUITOUS events may ſometimes, by their happy conſequences, be claſſed among premeditated deſigns. Such was the unforeſeen cauſe which called us to Peru; for otherwiſe the hiſtory of our voyage would have been deprived of a great many remarkable and inſtructive particulars; as our obſervations would have been limited to the province of Quito. But by this invitation of the vice-roy of Peru, we are now enabled to lead the reader into that large and luxuriant field, the fertile province of Lima, and the ſplendid city of that name, ſo juſtly made the capital of Peru, and the queen of all the cities in South America. It will alſo appear that our work would have ſuffered a great imperfection, and the reader conſequently diſappointed in finding no account of thoſe magnificent particulars, which his curioſity had doubtleſs promiſed itſelf, from a deſcription of this famous city, and an accurate knowledge of the capital province. Nor would it have been any ſmall mortification to ourſelves, to have loſt the opportunity of contemplating thoſe noble objects, which ſo greatly increaſe the value of our work, though already enriched with ſuch aſtronomical obſervations and nautical remarks, as we hope will prove agreeable to the intelligent reader. At the ſame time it opens a method of extending our reſearches into the other more diſtant countries, for the farther utility and ornament of this voyage; which, as it was founded on the moſt noble principles, ſhould be conducted and cloſed with an uniform dignity.

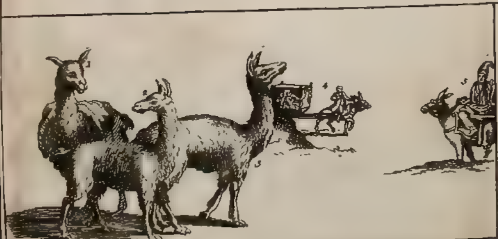
My deſign however is not to repreſent Lima in its preſent ſituation, as I ſhould then, inſtead of noble and magnificent objects, introduce the moſt melancholy and ſhocking ſcenes; ruinated palaces, churches, towers, and other ſtately works of art, together with the inferior buildings of which this opulent city conſiſted, now thrown into ruin and confuſion, by the tremendous earthquake of October the 28th, 1746; the affecting account of which reached Europe with the ſwiftneſs which uſually attends unfortunate advices, and concerning which, we ſhall be more particular in another place. I ſhall not therefore deſcribe Lima, as waſted by this terrible convulſion of nature; but as the emporium of this part of *America*, and endeavour to give the reader an idea of its former glory, magnificence, opulence, and other particulars which rendered it ſo famous in the world, before it ſuffered under this fatal cataſtrophe; the recollection of which cannot fail of being painful to every lover of his country, and every perſon of humanity.

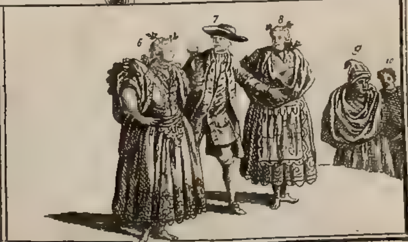
The city of Lima, or as it is alſo called the city of the kings, was, according to Garcilaſo, in his hiſtory of the Yncas, founded by Don Franciſco Pizarro, on the feaſt of the Epiphany, 1535; tho' others affirm that the firſt ſtone was not laid till the 18th of January that year; and the latter opinion is confirmed by the act, or record of its foundation, ſtill preſerved in the archives of that city. It is ſituated in the ſpacious and delightful valley of Rimac, an Indian word, and the true name of the city itſelf, from a corrupt pronunciation of which word the Spaniards have


PLAN of LIMA


PLAN of LIMA
Scale of Toises
100


The PORT of CALLAO
Lucon
Wolf Iſlands
River of Lima
Road to Lima
1. Callao
2. Lima
El Corcobado
Fronton
Iſle of St. Laurence
Scale of Toiſes.

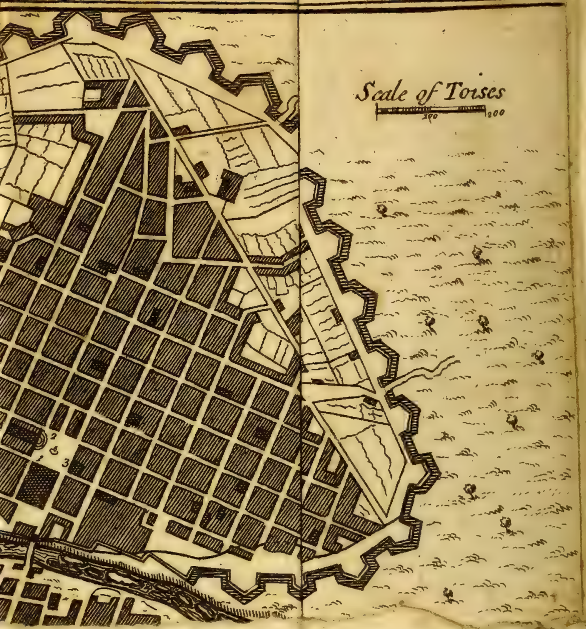




J. Mynde ſc.

1. The Llama or Peruvian Sheep.
2. Vicogn.
3. The Huanoco.
4. The Calaſh used at Lima.
5. A Meſtizo woman on horseback.
6. A Lady of Lima.
7. A Spaniard in the Peruvian dreſs.
8. A Lady of Lima in a riding dreſs.
9. A Mulatto woman. 10. A Negro servant.

PL. VI Pag. 3



Scale of Toises
100
200
1
2
3

have derived Lima. Rimac is the name by which both the valley and the river are ſtill called. This appellation is derived from an idol to which the native Indians uſed to offer ſacrifice, as did alſo the Yncas, after they had extended their empire hither; and as it was ſuppoſed to return anſwer to the prayers addreſſed to it, they called it by way of diſtinction Rimac, or, he who ſpeaks. Lima, according to ſeveral obſervations we made for that purpoſe, ſtands in the latitude of 12° 2′ 31″ S. and its longitude from the meridian of Teneriffe is 299° 27′ 7⅔″. The variation of the needle is 9° 2′ 30″ eaſterly.

Its ſituation is one of the moſt advantageous that can be imagined; for being in the center of that ſpacious valley, it commands the whole without any difficulty. Northward, tho' at a conſiderable diſtance, is the cordillera, or chain of the Andes; from whence ſome hills project into the valley, the neareſt of which to the city are thoſe of St. Chriſtopher, and Amancaes. The perpendicular height of the former, according to a geometrical menſuration performed by Don George Juan, and M. de la Condamine in 1737, is 134 toiſes; but father Fevilleé, makes it 136 toiſes and one foot, which difference doubtleſs proceeds from not having meaſured with equal exactneſs, the baſe on which both founded their calculations. The height of the Amancaes, is little leſs than the former, and ſituated about a quarter of a league from the city.

The river, which is of the ſame name, waſhes the walls of Lima, and when not increaſed by the torrents from the mountains is eaſily forded; but at other times, beſides the increaſe of its breadth, its depth and rapidity render fording impoſſible; and accordingly a very elegant and ſpacious ſtone bridge is built over it, having at one end a gate, the beautiful architecture of which is equal to the other parts of this uſeful ſtructure. This gate forms the entrance into the city, and leads to the grand ſquare, which is very large and finely ornamented. In the center is a fountain, equally remarkable for its grandeur and capacity. In the center is a bronze ſtatue of fame, and on the angles are four ſmall baſons. The water is ejected through the trumpet of the ſtatue, and alſo through the mouths of eight lions which ſurround it, and greatly heighten the beauty of this work. The eaſt ſide of the ſquare is filled by the cathedral and the archiepiſcopal palace, whoſe height ſurpaſſes the other buildings in the city. Its principal foundations, and the baſes of its columns and pilaſters, together with the capital front which faces the weſt, are of free ſtone; the inſide reſembles that of Seville, but not ſo large. The outſide is adorned with a very magnificent facade or frontiſpiece, riſing into two lofty towers, and in the center is the grand portal. Round the whole runs a grand gallery, with a baluſtrade of wood, reſembling braſs in colour, and at proper diſtances are ſeveral pyramids, which greatly augment the magnificence of the ſtructure. In the north ſide of the ſquare is the vice-roy's palace, in which are the ſeveral courts of juſtice, together with the offices of revenue, and the ſtate priſon. This was formerly a very remarkable building, both with regard to its largeneſs and architecture, but the greateſt part of it being thrown down by the dreadful earthquake with which the city was viſited, Oct. 20th, 1687, it now conſiſts only of ſome of the lower apartments erected on a terras, and is uſed as the reſidence of the vice-roy and his family.

On the weſt ſide which faces the cathedral, is the council-houſe, and the city priſon; the South ſide is filled with private houſes, having only one ſtory; but the fronts being of ſtone, their uniformity, porticoes, and elegance, are a great embelliſhment to the ſquare, each ſide of which is 80 toiſes.

The form of the city is triangular, the baſe, or longeſt ſide, extending along the banks of the river.

Its length is 1920 toiſes, or exactly two thirds of a league. Its greateſt breadth from N. to S. that is, from the bridge to the angle oppoſite to the baſe, is 1080 toiſes, or two fifths of a league. It is ſurrounded with a brick wall, which anſwers its original intention, but is without any manner of regularity. This work was begun and finiſhed by the duke de la Palata in the year 1685. It is flanked with 34 baſtions, but without platforms or embraſures; the intention of it being merely to incloſe the city, and render it capable of ſuſtaining any ſudden attack of the Indians. It has, in its whole circumference, ſeven gates, and three poſterns.

ON the ſide of the river oppoſite to the city is a ſuburb, called St. Lazaro, which has, within theſe few years, greatly increaſed. All the ſtreets of this ſuburb, like thoſe of the city, are broad, parallel, or at right angles, ſome running from N. to S. and others from E. to W. forming ſquares of houſes, each 150 yards in front, the uſual dimenſions of all theſe quadras or ſquares in this country, whereas thoſe of Quito are only 100. The ſtreets are paved, and along them run ſtreams of water, conducted from the river a little above the city; and being arched over contribute to its cleanlineſs, without the leaſt inconveniency.

THE houſes, though for the moſt part low, are commodious, and make a good appearance. They are all of Baxareque and Quincha. They appear indeed to be compoſed of more ſolid materials, both with regard to the thickneſs of the principal walls, and the imitation of cornices on them; and that they may the better ſupport themſelves under the ſhocks of earthquakes, of which this city has had ſo many dreadful inſtances, the principal parts are of wood, mortiſed into the rafters of the roof, and thoſe which ſerve for walls are lined both within and without with wild canes, and chagllas or oſiers; ſo that the timber work is totally incloſed. Theſe oſiers are plaiſtered over with clay, and white waſhed, but the fronts painted in imitation of free-ſtone. They afterwards add cornices and porticos which are alſo painted of a ſtone colour. Thus the whole front impoſes on the ſight, and ſtrangers ſuppoſe them to be built of thoſe materials which they only imitate. The roofs are flat, and covered only ſo far as is neceſſary to keep out the wind and intercept the rays of the ſun. The pieces of timber, of which the roofs are formed, and which on the inſide are decorated with elegant mouldings and other ornaments, are covered with clay to preſerve them from the ſun. This ſlender covering is ſufficient, as no violent rains are ever known here. Thus the houſes are in leſs danger than if built of more compact materials; for the whole building yields to the motions of the earthquakes, and the foundations which are connected with the ſeveral parts of the building follow the ſame motion; and by that means are not ſo eaſily thrown down.

The wild canes, which ſerve for the inner parts of the walls, reſemble in length and bigneſs, thoſe known in Europe, but without any cavity. The wood of them is very ſolid, and little ſubject to rot. The chaglla is alſo a kind of ſhrub growing wild in the foreſts and on the banks of rivers. It is ſtrong and flexible like the oſier. Theſe are the materials of which the houſes in all the towns of Valles mentioned in the preceding chapter, are built.

Towards the eaſt and weſt parts of the city, but within the walls, are a great many fruit and kitchen gardens; and moſt of the principal houſes have gardens for entertainments, being continually refreſhed with water by means of the canals.

The whole city is divided into the five following pariſhes. 1. Sagrario, which has three prieſts. 2. St. Ann, and 3. St. Sebaſtian, each having two prieſts. 4. St. Marcelo, and 5. St. Lazaro, each of which has one prieſt only. The pariſh of the latter extends itſelf five leagues, namely, to the valley of Carabaillo, and to it belong the many large plantations in that ſpace; chapels are therefore erected for celebrating maſs on days of precept, that the people may perform their duty without the fatigue and trouble of travelling to Lima. Here are alſo two chapels of eaſe, that of St. Salvador in the pariſh of Sr. Ann; and that of the orphans, in the Sagrario. There is alſo in the Cercado, one of the quarters of the town, a pariſh of Indians, under the care of the Jeſuits.

The convents here are very numerous; four Dominicans, viz. La Caſa grande, Recolleccion de la Magdalena, the college of St. Thomas, appropriated to literature, and Santa Roſa. Three of Franciſcans, viz. Caſa grande, Recoletos de nueſtra Senora de los Angeles, or Guadalupe, and Los Deſcalzos de San Diego, the latter is in the ſuburb of San Lazaro. Three of the order of Auguſtin, namely, Caſa grande; the Seminary of San Ildefonſo, a literary college; and the noviciate at Nueſtra Senora de Guia. Three alſo belong to the order of Mercy, namely, the Caſa principal, the college of St. Pedro Nolaſco, and a Recolleccion, called Bethlehem.

The Jeſuits have ſix colleges or houſes, which are thoſe of St. Paul, their principal college; St. Martin, a college for ſecular ſtudents; St. Anthony, a noviciate; the houſe of poſſeſſion, or deſamparados, under the invocation of Nueſtra Senora de los Dolores; a college in the Circado, where the Indians are inſtructed in the precepts of religion; and that of the Chacarilla, appointed for the exerciſes of St. Ignatius; and accordingly all ſeculars on their deſire to perform them are admitted. They are alſo allowed the liberty of beginning when moſt convenient for themſelves, and are handſomely entertained by the college during the eight days of their continuance. But it muſt be obſerved, that of all theſe convents, the Caſas grandes, are now the moſt conſiderable; the others, beſides being ſmall, have but few members, and ſmall revenues.

Besides the preceding nineteen convents and colleges, here are alſo an oratory of St. Philip Neri; a monaſtery of the order of St. Benedict, with the title of Nueſtra Senora de Monſerrat, the abbey of which is commonly the only member, and ſent from Spain; and though this foundation is one of the moſt ancient in the whole city, its revenue is hardly ſufficient to ſupport any more: a convent called Nueſtra Senora de la Buena Muerte, or the order of that name, generally known by the name of Agonizantes. This order founded an hoſpital in the city, in 1715, under the particular direction of the fathers Juan Mugnos, and Juan Fernandez, who with a lay brother of the ſame order having in 1736, obtained a licenſe from the council of the Indians, went from Spain and founded a convent of community in every form. In the ſuburb of St. Lazaro is alſo a convent of St. Francis de Paula, a modern foundation, under the name of Nueſtro Senora del Scorro.

There are alſo in Lima three other charitable foundations, namely, St. Juan de Dios, ſerved by the religious of that order, and appropriated to the relief of perſons recovering from ſickneſs; and two of Bethlemites; one of which, being the Caſa grande, is without the city, and founded for the relief of ſick Indians, who are taken care of in Santa Ana; and the other within the city, called that of the incurables, being appropriated to perſons labouring under diſeaſes of that nature. The latter, as we have already obſerved,* was founded ſo early as the year 1671. This opulent city has alſo nine other hoſpitals, each appropriated to ſome peculiar charity.

1. San Andres, a royal foundation, admitting only Spaniards.

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* Chap. IV. Lib. V. Vol. I.

2. San Pedro, for poor eccleſiaſtics.

3. El Eſpiritu Santo, for mariners, and ſupported by the ſhips belonging to theſe ſeas, their crews being properly aſſeſſed for that purpoſe.

4. San Bartholome, for the negroes.

5. Senora Santa Ana, for the Indians.

6. San Pedro de Alcantara, for women.

7. Another for that uſe, under the care of the Bethlemite fathers, erected before their Caſa grande.

8. La Caridad, alſo for women.

9. San Lazaro, for the lepers, which with thoſe already enumerated, make twelve.

Here are alſo 14 nunneries, the number of perſons in which would be ſufficient to people a ſmall town. The 5 firſt are regulars, and the other 9 recollects.

1. La Encarnation. 2. La Conception. 3. Santa Cathalina. 4. Santa Clara. 5. La Trinidad. 6. El Carmen. 7. Santa Tereſa, ò El Carmen baxo. 8. Las Deſcalzas de San Joſeph. 9. Las capuchinas. 10. Las Nazarenas. 11. Las Mercidarias. 12. Santa Roſa. 13. Las Trinitarias Deſcalzas. 14. Las Monjas del Prado.

Laſtly, Here are four other conventual houſes, where ſome few of the ſiſters are not recluſes, tho' moſt of them obſerve that rule. Theſe houſes are:

1. Santa Roſa de Viterbo. 2. Nueſtra Senora del Patrocinio. 3. Nueſtra Senora de Capacabana, for Indian ladies. 4. San Joſeph.

The laſt is a retreat for women who deſire to be divorced from their huſbands. There is alſo a houſe conſtituted in the manner of convents, for poor women, and under the direction of an eccleſiaſtic appointed by the archbiſhop, who is alſo their chaplain.

THE moſt numerous of all theſe nunneries, are the Incarnation, Conception, Santa Clara, and Santa Cathalina. The others are indeed not ſo large; but the Recollects in the rectitude and auſterity of their lives, are an example to the whole city.

Here is alſo an orphan-houſe, divided into two colleges, one for the boys, and the other for the girls: beſides ſeveral chapels, in different parts of the city; but the following liſt will ſhew at once, the pariſhes, hoſpitals, churches and monaſteries of Lima; which was always no leſs conſpicuous with regard to a zeal for religion than for ſplendor.

List of the pariſhes, convents of each order, hoſpitals, nunneries, and conventual houſes in Lima.

Pariſhes 6.

Convents of San Domingo, 4. Of San Frances, 3. Of San Auguſtin, 3. Cf la Merced, 3.

Colleges of Jeſuits, 6.

Oratory of St. Philip Neri, 1.

Monastery of Benedictins, 1. Of San Franciſco de Paula, 1. Of Agonizantes, 1. Of San Juan de Dios, 1. Of Bethlemites, 2.

Nunneries of Regulars, 5. Of Recollets, 9.

Conventual Houſe, 4. Houſes for poor women, 1. Orphan houſe, 1. Hoſpitals, 12.

All the churches, both conventual and parochial, and alſo the chapels, are large, conſtructed partly of ſtone, and adorned with paintings and other decorations of great value; particularly the cathedral, the churches of St. Dominic, St. Francis, St. Auguſtin, the fathers of Mercy, and that of the Jeſuits, are ſo ſplendidly decorated, as to ſurpaſs deſcription; an idea being only to be formed by the ſight. The riches and pomp of this city, eſpecially on ſolemn feſtivals, are aſtoniſhing. The altars, from their very baſes to the borders of the paintings, are covered with maſſive ſilver, wrought into various kinds of ornaments. The walls alſo of the churches are hung with velvet, or tapeſtry of equal value, adorned with gold and ſilver fringes: all which in this country, is remarkably dear; and on theſe are ſplendid pieces of plate in various figures. If the eye be directed from the pillars, walls and ceiling, to the lower part of the church, it is equally dazzled with glittering objects, preſenting themſelves on all ſides; among which are candleſticks of maſſive ſilver, ſix or ſeven feet high, placed in two rows along the nave of the church; emboſſed tables of the ſame metal, ſupporting ſmaller candleſticks; and in the intervals betwixt them pedeſtals on which ſtand the ſtatues of angels. In fine, the whole church is covered with plate, or ſomething equal to it in value; ſo that divine ſervice, in theſe churches, is performed with a magnificence ſcarce to be imagined; and the ornaments, even on common days, with regard to their quantity, and richneſs, exceed thoſe which many cities of Europe pride themſelves with diſplaying on the moſt common occaſions.

IF ſuch immenſe riches are beſtowed on the body of the church, how can imagination itſelf form an idea of thoſe more immediately uſed in divine worſhip, ſuch as the ſacred veſſels, the chalices, oſtenſoriums, &c. in the richneſs of which there is a ſort of emulation between the ſeveral churches. In theſe the gold is covered with diamonds, pearls, and precious ſtones, ſo as to dazzle the eye of the ſpectator. The gold and ſilver ſtuff for veſtments and other decorations, are always of the richeſt and moſt valuable among thoſe brought over by the regiſter ſhips. In fine, whatever is employed in ornamenting the churches, is always the richeſt of the kind poſſible to be procured.

THE principal convents are very large, with convenient and airy apartments. Some parts of them, as the outward walls which incloſe them, are of unburnt bricks; but the building itſelf of quinchas or baxareques. The roofs of many are arched with brick, others only with quinchas; but of ſuch curious architecture as entirely to conceal the materials; ſo that the frontiſpieces, and principal gates have a majeſtic appearance. The columns, friezes, ſtatues and cornices are of wood, finely carved, but ſo nearly imitating the colour and appearance of ſtone, as only to be diſcovered by the touch. This ingenious imitation does not proceed from parſimony, but neceſſity; in order to avoid as much as poſſible the dreadful devaſtations of earthquakes, which will not admit of ſtructures built with ponderous materials.

THE churches are decorated with ſmall cupolas of a very pretty appearance; and though they are all of wood, the ſight cannot diſtinguiſh them from ſtone. The towers are of ſtone from the foundation the height of a toiſe and a half, or two toiſes, and from thence to the roof of the church of brick, but the remainder of wood painted of a free-ſtone colour, terminating in a ſtatue, or image alluding to the name of the church. The height of theſe may be nearly known from that of St. Dominic, which by a geometrical menſuration we found to be between 50 and 60 yards; a height which tho' ſmall in proportion to the largeneſs of the ſtructure, is a neceſſary caution both with regard to the ſhocks of earthquakes, and the weight of the bells, which in ſize and number exceed thoſe of Spain, and on a general ringing produce a very agreeable harmony.

ALL the convents are furniſhed with water from the city, though not from that of the rivulets, which, as we before obſerved, run through the ſtreets in covered channels; but brought from a ſpring by means of pipes. While on the other hand, both the monaſteries and nunneries are each obliged to maintain a fountain in the ſtreet, for the public uſe of poor people, who have not the conveniency of water in their houſes.

THE vice-roys whoſe power extends over all Peru, uſually reſide at Lima; but the province and audience of Quito has been lately detached from it; as we have obſerved in our account of that province. This government is triennial, though at the expiration of that term the ſovereign may prolong it. This office is of ſuch importance, that the vice-roy enjoys all the privileges of royalty. He is abſolute in all affairs, whether political, military, civil, criminal, or relating to the revenue, having under him offices and tribunals for executing the ſeveral branches of government; ſo that the grandeur of this employment is in every particular equal to the title. For the ſafety of his perſon and the dignity of his office, he has two bodies of guards; one of horſe, conſiſting of 160 private men, a captain, and a lieutenant: Their uniform is blue, turned up with red, and laced with ſilver. This troop conſiſts entirely of picked men, and all Spaniards. The captain's poſt is eſteemed very honourable. Theſe do duty at the principal gate of the palace; and when the vice-roy goes abroad, he is attended by a piquet guard conſiſting of eight of theſe troopers. The 2d is that of the halbadiers, conſiſting of 50 men, all Spaniards; dreſſed in a blue uniform, and crimſon velvet waiſtcoats laced with gold. Theſe do duty in the rooms leading to the chamber of audience, and private apartments. They alſo attend the vice-roy when he appears in public, or viſits the offices, and tribunals. The only officer of this body is a captain, whoſe poſt is alſo reckoned very eminent. Both captains are nominated by the vice-roy. Beſides theſe there is another guard within the palace, conſiſting of 100 private men, a captain, lieutenant and ſub-lieutenant; being a detachment from the garriſon of Callao. Theſe are occaſionally employed in executing the governor's orders, and the decrees of the tribunals, after they have received the ſanction of his aſſent.

The vice-roy, beſides aſſiſting at the courts of juſtice, and the councils relating both to the finances and war, gives every day public audience to all ſorts of perſons; for which purpoſe there are in the palace, three very grand and ſpacious rooms. In the firſt, which is adorned with the portraits of all the vice-roys, he receives the Indians and other caſts. In the ſecond, he gives audience to the Spaniards; and in the third, where, under a rich canopy are placed the pictures of the king and queen then reigning, he receives thoſe ladies who deſire to ſpeak to him in private without being known.

The affairs relating to the government are expedited by a ſecretary of ſtate, with an aſſiſtant, properly qualified for ſuch an arduous poſt. From this office are iſſued the orders for paſſports which muſt be had from every Corregidor in his juriſdiction. The ſecretary has alſo the power of filling all juridical employments as they become vacant, for the term of two years; as alſo thoſe of the magiſtracy, who at the expiration of their term, have not been replaced by others of his majeſty's nomination. In a word, this office may be ſaid to be the channel by which all affairs relating both to war and government are tranſacted.

All cauſes relating to juſtice, are tried in the court called the *Audiencia*, from the decrees of which there is no appeal to the ſupreme council of the Indies, unleſs after notorious injuſtice or a ſecond trial; as the vice-roy himſelf preſides in it. The Audiencia which is the chief court at Lima, is compoſed of 8 auditors or judges, and a fiſcal, for civil cauſes. This court is held in the vice-roy's palace, in the 3 ſaloons appropriated to it. In one the deliberations are held, and in the other two, the cauſes are tried either publicly or privately, the ſenior judge always preſiding. Criminal cauſes are tried in a 4th apartment, the judges being 4 Alcaldes of the court, and a criminal fiſcal. There is alſo a fiſcal protector of the Indians, and ſome ſupernumeraries.

Next to the tribunal of audience, is the chamber of accounts, conſiſting of a commiſſioner, five chief accomptants, two receivers, and two directors, with other inferior officers belonging to each claſs. Here all Corregidors, intruſted to collect the revenue, paſs their accounts. Here alſo the diſtributions and managements of the royal revenue are regulated.

LASTLY, the royal treaſury, under a treaſurer, accomptant, and agent, who have the ſuperintendance of all his majeſty's revenue of what kind ſoever; ſince whatever revenue ariſes from the other parts of this province is remitted to Lima as the capital of the kingdom.

THE corporation of Lima, conſiſts of regidores or aldermen, an alferez real, or ſheriff; and two alcaldes, or royal judges; all being noblemen of the firſt diſtinction in the city. Theſe have the direction of the police, and the ordinary adminiſtration of juſtice. The alcaldes preſide alternately every month; for by a particular privilege of this city, the juriſdiction of its corregidor extends only to the Indians.

HERE is a court for the effects of deceaſed perſons, which takes cognizance of the goods of thoſe dying inteſtate, and without lawful heir; and likewiſe of thoſe entruſted with the effects of other perſons. It conſiſts of a judge, who is generally one of the auditors, a counſellor, and an accomptant.

THE next tribunal is that of commerce, or the Conſulado. Its principal officers are a preſident and two conſuls. All who are entered in the liſt of merchants are members of it, and have a vote in the choice of theſe officers, who, with an aſſeſſor, decide all commercial diſputes and proceſſes, by the ſame rules as the conſulados at Cadiz and Bilboa.

LIMA has alſo a corregidor, whoſe juriſdiction extends to all Indians both within the city and five leagues round it. The principal places in this juriſdiction are Surco, Los Chorillos, Miraflores, la Magdalena, Lurigancho, Late, Pachacama, and Lurin, together with the Indian inhabitants of the two ſuburbs of Callao, called new and old Pitipiti. The infinite number of Indians who inhabited this valley before and at the time of the conqueſt, are now reduced to the few inhabitants of the above-mentioned places; and have only two Caſiques, namely, thoſe of Miraflures and Sureo, and theſe in ſuch low circumſtances as to teach muſic at Lima for ſubſiſtence.

The cathedral chapter, beſides the archbiſhop, conſiſts of the dean, archdeacon, chanter, treaſurer, and rector, four canons by ſuffrage, five by preſentation, ſix prebendaries, and ſix ſemi-prebendaries; but the eccleſiaſtical tribunal conſiſts only of the archbiſhop and his chancellor. His ſuffragans are the biſhops of Panama, Quito, Truxillo, Guamanga, Arequipa, Cuzco, St. Jago, and Conception; the two laſt are in the kingdom of Chili.

The tribunal of inquiſition conſiſts of two inquiſitors, and a fiſcal, who like the ſubordinate officers, are nominated by the inquiſitor general; and in caſe of a vacancy, filled up by the ſupreme council of the inquiſition.

The tribunal of the Cruzada, is conducted by a ſub-deligate commiſſary, an accomptant, and treaſurer, with other inferior officers. But the dean, or ſenior judge of the audience, generally aſſiſts at its deliberations.

Lastly, here is alſo a mint with its proper officers, where the gold and ſilver are coined.

In the univerſity and colleges, the happy geniuſes of the natives are improved by divine and human learning, and as we ſhall ſhew in the ſequel, ſoon give elegant ſpecimens of their future acquiſitions. They are in this much more indebted to nature than either to art or to their own application; and if they do not equally diſtinguiſh themſelves in other ſtudies, it is not for want of talents, but of proper perſons to inſtruct them in the neceſſary elements. For by their ready comprehenſion of whatever is taught them, we may conclude, that their abilities are equal to other improvements. The chief of theſe ſeminaries is the univerſity of St. Mark, and the colleges of St. Toribio, St. Martin, and St. Philip. In the former are chairs for all the ſciences, and filled by ſuffrage; a method always favourable for perſons of learning and underſtanding. Some of theſe profeſſors have, notwithſtanding the vaſt diſtance, gained the applauſe of the literati of Europe.

THE univerſity makes a ſtately appearance without, and its inſide is decorated with ſuitable ornaments. It has a large ſquare court, with a handſome vaulted piazza round it. Along the ſides are the halls, where lectures are read; and in one of its angles is the theatre for the public acts, adorned with the portraits of the ſeveral great men who had their education in this ſeat of learning, in frames finely ornamented with ſculpture, and richly gilded; as are alſo the two rows of ſeats which extend entirely round the theatre.

FROM what has been ſaid it ſufficiently appears, that Lima is not only large, magnificent, and diſtinguiſhed, as the capital of the kingdom, by the reſidence of the vice-roy, and the ſuperior courts and offices, but alſo that it has an acknowledged ſuperiority over the other cities in theſe parts, from the public nurſeries erected for the advancement of learning and the ſciences.

THE richneſs of the churches, and the ſplendor with which divine ſervice is performed, we have already deſcribed. The magnificence of its inhabitants and of its public ſolemnities are proportional, and diſplayed with a dignity peculiar to minds inflamed with a deſire of honour, and who value themſelves on celebrating the principal ſolemnities in a manner, which diſtinguiſhes Lima from the other cities of its kingdom: tho' the latter are not wanting in their endeavours to vie with their capital

OF all the ſolemnities obſerved in America, the public entrance of the vice-roy, is the moſt ſplendid; and in which the amazing pomp of Lima is particularly diſplayed. Nothing is ſeen but rich coaches and calaſhes, laces, jewels, and ſplendid equipages, in which the nobility carry their emulation to an aſtoniſhing height. In a word, this ceremony is ſo remarkable, that I flatter myſelf the reader will not be diſpleaſed at the deſcription.

CHAP. IV.

Of the public Entrance of the Vice-Roy at LIMA; *his Reception, and the chief annual Solemnities.*

ON the landing of the vice-roy at Paita, two hundred and four leagues from Lima, he ſends a perſon of great diſtinction, generally ſome officer of his retinue, to Lima, with the character of an ambaſſador; and, by a memoir, informs his predeceſſor of his arrival, in conformity to his majeſty's orders, who had been pleaſed to confer on him the government of that kingdom. On this Ambaſſador's arrival at Lima, the late vice-roy ſends a meſſenger to compliment him on his ſafe arrival; and on diſmiſſing the ambaſſador, preſents him with ſome jewel of great value, and a juriſdiction or two which happen at that time to be vacant, together with an indulgence of officiating by deputy, if moſt agreeable to him. The corregidor of Piura receives the new vice-roy at Paita, and provides litters, mules, and every other neceſſary for the vice-roy and his retinue, as far as the next juriſdiction. He alſo orders booths to be built at the halting places in the deſarts; attends him in perſon, and defrays all the expences, till relieved by the next corregidor. Being at length arrived at Lima, he proceeds, as it were incognito, through the city to Callao, about two leagues and a half diſtant. In this place he is received and acknowledged by one of the ordinary alcaldes of Lima, appointed for that purpoſe, and alſo by the military officers. He is lodged in the vice-roy's palace, which, on this occaſion, is adorned with aſtoniſhing magnificence. The next day, all the courts, ſecular and eccleſiaſtical, wait on him from Lima, and he receives them under a canopy in the following order. The audiencia, the chamber of accounts, the cathedral chapter, the magiſtracy, the conſulado, the inquiſition, the tribunal de Cruzada, the ſuperiors of the religious orders, the colleges, and other perſons of eminence. On this day the judges attend the vice-roy to an entertainment given by the Alcalde; and all perſons of note take a pride in doing the like to his attendants. At night there is a play, to which the ladies are admitted veiled, and in their uſual dreſs, to ſee the new vice-roy.

The ſecond day after his arrival at Callao, he goes in a coach provided for him by the city, to the chapel de la Legua, ſo called from its being about half-way between Callao and Lima, where he is met by the late vice-roy, and both alighting from their coaches, the latter delivers to him a truncheon as the enſign of the government of the kingdom. After this, and the uſual compliments, they ſeparate.

If the new vice-roy intends to make his public entry into Lima, in a few days he returns to Callao, where he ſtays till the day appointed; but as a longer ſpace is generally allowed for the many preparatives neceſſary to ſuch a ceremony, he continues his journey to Lima, and takes up his reſidence in his palace, the fitting up of which on this occaſion, is committed to the junior auditor, and the ordinary alcalde.

On the day of public entry, the ſtreets are cleaned, and hung with tapeſtry, and magnificent triumphal arches erected at proper diſtances. At two in the afternoon the vice-roy goes privately to the church belonging to the monaſtery of Monſerrat, which is ſeparated by an arch and a gate from the ſtreet, where the cavalcade is to begin. As ſoon as all who are to aſſiſt in the proceſſion are aſſembled, the vice-roy and his retinue mount on horſes, provided by the city for this ceremony, and the gates being thrown open, the proceſſion begins in the following order.

The militia; the colleges; the univerſity with the profeſſors in their proper habits; the chamber of accompts; the audience on horſes with trappings; the magiſtracy, in crimſon velvet robes, lined with brocade of the ſame colour, and a particular kind of caps on their heads, a dreſs only uſed on this occaſion. Some members of the corporation who walk on foot, ſupport the canopy over the vice-roy, and the two ordinary alcaldes, which are in the ſame dreſs, and walk in the proceſſion, act as equerries, holding the bridle of his horſe. This part of the ceremony, tho' prohibited by the laws of the Indians, is ſtill performed in the manner I have deſcribed; for the cuſtom being of great antiquity, the magiſtrates have not thought proper to alter it, that the reſpect to the vice-roy might not ſuffer any diminution, and no perſon has yet ventured to be the firſt in refuſing to comply with it.

This proceſſion is of conſiderable length, the vice-roy paſſing through ſeveral ſtreets till he comes to the great ſquare, in which the whole company draw up facing the cathedral, where he alights, and is received by the archbiſhop and chapter. Te Deum is then ſung before the vice-roy, and the officers placed in their reſpective ſeats; after which he again mounts his horſe and proceeds to the palace-gate, where he is received by the Audiencia, and conducted to an apartment in which a ſplendid collation is provided, as are alſo others for the nobility in the anti-chambers.

On the morning of the following day, he returns to the cathedral in his coach, with the retinue and pomp uſual on ſolemn feſtivals, and public ceremonies. He is preceded by the whole troop of horſe guards, the members of the ſeveral tribunals in their coaches, and after them the vice-roy himſelf with his family, the company of halbadiers bringing up the rear. On this occaſion all the riches and ornaments of the church are diſplayed, the archbiſhop celebrates in his pontifical robes, the maſs of thanſgiving; and the ſermon is preached by one of the beſt orators of the chapter. From hence the vice-roy returns to the palace attended by all the nobility, who omit nothing to make a ſplendid figure on theſe occaſions. In the evening of this, and the two following days, the collations are repeated, with all the plenty and delicacy imaginable. To increaſe the feſtivity, all women of credit have free acceſs to the halls, galleries, and gardens of the palace, when they are fond of ſhewing the diſpoſitions of their genius, either by the vivacity of repartees, or ſpirited converſations, in which they often ſilence ſtrangers of very ready wit.

THIS ſhew and ceremony is ſucceeded by bull feaſts at the city's expence, which continue five days. The three firſt for the vice-roy, and the two latter in compliment to the ambaſſador who brought advice of his arrival, and the great honour conferred on him by the ſovereign in the government of this kingdom.

THIS ambaſſador, who, as I before obſerved, is always a perſon of eminent quality, makes alſo a public entrance into Lima on horſeback on the day of his arrival, and the nobility being informed of his approach, go out to receive and conduct him to the palace, from whence they carry him to the lodgings prepared for him. This ceremony uſed to be immediately followed by feaſts and public diverſions; but in order to avoid that inconvenience, juſt when the city is every where buſied in preparing for the reception of the vice-roy, they are deferred, and given at one and the ſame time as above recited.

The bull-feaſts are ſucceeded by that ceremony, in which the univerſity, the colleges, the convents and nunneries acknowledge him as their vice-royal protector. This is alſo accompanied with great ſplendor; and valuable prizes are beſtowed on thoſe who make the moſt ingenious compoſitions in his praiſe. Theſe ceremonies, which greatly heighten the magnificence of this city, are ſo little known in Europe, that I ſhall be excuſed for enlarging on them.

They are begun by the univerſity, and the rector prepares a poetical conteſt, adapted to diſplay either the wit or learning of the competitors. After publiſhing the themes, and the prizes to be given to thoſe who beſt handle the ſubjects they have choſen, he waits on the vice-roy to know when he will be pleaſed to honour the univerſity with his preſence; and, the time being fixed, every part of the principal court is adorned with the utmoſt magnificence. The prizes which are placed in order diſtinguiſh themſelves by their richneſs, while the pillars and columns are hung with emblematical devices, or pertinent apothegms on poliſhed ſhields, ſurrounded by the moſt beautiful mouldings.

The reception is in the following order. On the vice-roy's entering the court he is conducted to the rectoral chair, which, on this occaſion, glitters with the magnificence of an eaſtern throne. Oppoſite to it ſits the rector, or, in his abſence, one of the moſt eminent members of that learned body, who makes a ſpeech, in which he expreſſes the ſatisfaction the whole univerſity feels in ſuch a patron. After this the vice-roy returns to his palace, where, the day following, the rector preſents him with a book, containing the poetical conteſt, bound in velvet, and plated at the corners with gold, accompanied with ſome elegant piece of furniture, whoſe value is never leſs than eight hundred or a thouſand crowns.

THE principal end of the univerſity in this ceremony being to ingratiate itſelf with the vice-roy and his family, the rector contrives that the poetical pieces which gain the prizes, be made in the name of the principal perſons of his family, and accordingly the moſt diſtinguiſhed prizes are preſented to them; and there being 12 ſubjects in the conteſt, there are three prizes for each, of which the two inferior fall to thoſe members, whoſe compoſitions are moſt approved of. Theſe prizes are pieces of plate, valuable both for their weight and workmanſhip.

THE univerſity is followed by the colleges of St. Philip and St. Martin, with the ſame ceremonies, except the poetical conteſt.

NEXT follow the religious orders, according to the antiquity of their foundation in the Indies. Theſe preſent to the vice-roy the beſt theſes maintained by ſtudents at the public acts.

THE vice-roy is preſent at them all, and each diſputant pays him ſome elegant compliment, before he enters on his ſubject.

THE ſuperiors of the nunneries ſend him their congratulatory compliments, and when he is pleaſed in return to viſit them, they entertain him with a very fine concert of muſick, of which the vocal parts are truly charming: and at his retiring they preſent him with ſome of the chief curioſities which their reſpective inſtitutes allow to be made by them.

BESIDES theſe feſtivities and ceremonies, which are indeed the moſt remarkable; there are alſo others, ſome of which are annual, in which the riches and liberality of the inhabitants are no leſs conſpicuous. Particularly on New Year's Day, at the election of Alcaldes, who being afterwards confirmed by the vice-roy, appear publickly on horſe-back the ſame evening, and ride on each ſide of him, in very magnificent habits ornamented with jewels and the furniture of their horſes perfectly anſwerable. This cavalcade is very pompous, being preceded by the two companies of horſe-guards, the halbadiers, followed by the members of the tribunals in their coaches, the vice-roy's retinue, and the nobility of both ſexes.

On twelfth-day in the morning, and the preceding evening, the vice-roy rides on horſe-back thro' the town, with the royal ſtandard carried in great pomp before him. This is performed in commemoration of the building of the city, which, as we have already obſerved, was begun on this day; ſolemn veſpers are ſung in the cathedral, and a maſs celebrated; and the ceremony is concluded with a cavalcade, like that on new year's day.

The Alcaldes choſen for the current year, give public entertainments in their houſes, each three nights ſucceſſively; but that the feaſts of one might not interfere with thoſe of another, and occaſion reſentments, they agree for one to hold his feaſts the three days immediately ſucceeding the election, and the other on twelfth day and the two following. Thus each has a greater number of gueſts, and the entertainments are more ſplendid and ſumptuous. The other feaſts in the courſe of the year, are not inferior to theſe either with regard to numbers or expence; at leaſt the number of them muſt excite a high idea of the wealth and magnificence of Lima.

CHAP. V.

Of the Inhabitants of LIMA.

HAVING, in our accounts of ſeveral towns thro' which we paſſed to Lima, included alſo the inhabitants, we ſhall obſerve the ſame rule with regard to Lima; for though amidſt ſuch an infinite variety of cuſtoms, there is always ſome reſemblance between thoſe of neighbouring people, yet the difference is alſo conſiderable, and no where more ſo than on this continent, where it doubtleſs ariſes from the great diſtance between the ſeveral towns; and, conſequently, I may ſay, from the different genius's and diſpoſitions of the people. And though Lima is the capital of the country, it will appear that it is not a model to other places, with regard to dreſs, cuſtoms, and manner of living.

The inhabitants of Lima are compoſed of whites, or Spaniards, Negroes, Indians, Meſtizos, and other caſts, proceeding from the mixture of all three.

The Spaniſh families are very numerous; Lima according to the loweſt computation, containing ſixteen or eighteen thouſand whites. Among theſe are reckoned a third or fourth part of the moſt diſtinguiſhed nobility of Peru; and many of theſe dignified with the ſtile of ancient or modern Caſtilians, among which are no leſs than 45 counts and marquiſes. The number of knights belonging to the ſeveral military orders is alſo very conſiderable. Beſides theſe are many families no leſs reſpectable and living in equal ſplendor; particularly 24 gentlemen of large eſtates, but without titles, tho' moſt of them have ancient ſeats, a proof of the antiquity of their families. One of theſe traces, with undeniable certainty, his deſcent from the Yncas. The name of this family is Ampuero, ſo called from one of the Spaniſh commanders at the conqueſt of this country, who married a Coya, or daughter of the Ynca. To this family the kings of Spain have been pleaſed to grant ſeveral diſtinguiſhing honours and privileges, as marks of its great quality: and many of the moſt eminent families in the city have deſired intermarriages with it. All thoſe families live in a manner becoming their rank, having eſtates equal to their generous diſpoſitions, keeping a great number of ſlaves and other domeſtics, and thoſe who affect making the greateſt figure, have coaches, while others content themſelves with calaſhes or chaiſes, which are here ſo common, that no family of any ſubſtance is without one. It muſt be owned that theſe carriages are more neceſſary here than in other cities, on account of the numberleſs droves of mules which continually paſs thro' Lima, and cover the ſtreets with their dung, which being ſoon dried by the ſun and the wind, turns to a nauſeous duſt, ſcarce ſupportable to thoſe who walk on foot. Theſe chaiſes, which are drawn by a mule, and guided by a driver, have only two wheels, with two ſeats oppoſite to each other, ſo that on occaſion they will hold four perſons. They are very ſlight and airy; but on account of the gildings and other decorations, ſometimes coſt eight hundred or a thouſand crowns. The number of them is ſaid to amount to 5 or 6000; and that of coaches is alſo very conſiderable, tho' not equal to the former. The funds to ſupport theſe expences, which in no other parts would ruin families, are their large eſtates and plantations, civil and military employments or commerce, which is here accounted no derogation to families of the greateſt diſtinction; but by this commerce is not to be underſtood the buying and ſelling by retail or in ſhops, every one trading proportional to his character and ſubſtance. Hence families are preſerved from thoſe diſaſters too common in Spain, where titles are frequently found without a fortune capable of ſupporting their dignity. Commerce is ſo far from being conſidered as a diſgrace at Lima, that the greateſt fortunes have been raiſed by it; thoſe on the contrary, being rather deſpiſed, who not being bleſſed with a ſufficient eſtate, through indolence, neglect to have recourſe to it for improving their fortunes. This cuſtom, or reſource, which was eſtabliſhed there without any determinate end, being introduced by a vain deſire of the firſt Spaniards to acquire wealth, is now the real ſupport of that ſplendor in which thoſe families live; and whatever repugnance theſe military gentlemen might originally have to commerce, it was immediately removed by a royal proclamation, by which it was declared that commerce in the Indies ſhould not exclude from nobility or the military orders; a very wiſe meaſure, and of which Spain would be ſtill more ſenſible, were it extended to all its dependencies.

At Lima, as at Quito, and all Spaniſh America, ſome of the eminent families have been long ſince ſettled there, whilſt the proſperity of others is of a later date; for being the center of the whole commerce of Peru, a greater number of Europeans reſort to it, than to any other city; ſome for trade, and others, from being inveſted in Spain with conſiderable employments: among both are perſons of the greateſt merit; and tho' many after they have finiſhed their reſpective affairs, return home, yet the major part induced by the fertility of the ſoil, and goodneſs of the climate, remain at Lima, and marry young ladies remarkable equally for the gifts of fortune as thoſe of nature; and thus new families are continually ſettled.

The Negroes, Mulattoes, and their deſcendants, form the greater number of the inhabitants; and of theſe are the greateſt part of the mechanics; tho' here the Europeans alſo follow the ſame occupations, which are not at Lima reckoned diſgraceful to them, as they are at Quito; for gain being here the univerſal paſſion, the inhabitants purſue it by means of any trade, without regard to its being followed by Mulattoes, intereſt here preponderating againſt any other conſideration.

The third, and laſt claſs of inhabitants are the Indians and Meſtizos, but theſe are very ſmall in proportion to the largeneſs of the city, and the multitudes of the ſecond claſs. They are employed in agriculture, in making earthen ware, and bringing all kinds of proviſions to market, domeſtick ſervices being performed by Negroes and Mulattoes, either ſlaves or free, though generally by the former.

The uſual dreſs of the men differs very little from that worn in Spain, nor is the diſtinction between the ſeveral claſſes very great; for the uſe of all ſorts of cloth being allowed, every one wears what he can purchaſe. So that it is not uncommon to ſee a Mulatto, or any other mechanic dreſſed in a tiſſue, equal to any thing that can be worn by a more opulent perſon. They all greatly affect fine cloaths, and it may be ſaid without exaggeration, that the fineſt ſtuffs made in countries, where induſtry is always inventing ſomething new, are more generally ſeen at Lima than in any other place; vanity and oſtentation not being reſtrained by cuſtom or law. Thus the great quantities brought in the galleons and regiſter ſhips notwithſtanding they ſell here prodigiouſly above their prime coſt in Europe, the richeſt of them are uſed as cloaths, and worn with a careleſneſs little ſuitable to their extravagant price; but in this article the men are greatly exceeded by the women, whoſe paſſion for dreſs is ſuch as to deſerve a more particular account.

In the choice of laces, the women carry their taſte to a prodigious exceſs; nor is this an emulation confined to perſons of quality, but has ſpread thro' all ranks, except the loweſt claſs of negroes. The laces are ſewed to their linen, which is of the fineſt ſort, though very little of it is ſeen, the greateſt part of it, eſpecially in ſome dreſſes, being always covered with lace; ſo that the little which appears ſeems rather for ornament than uſe. Theſe laces too muſt be all of Flanders manufacture, no woman of rank condeſcending to look on any other.

Their dreſs is very different from the European, which the cuſtom of the country alone can render excuſable; indeed to Spaniards at their firſt coming over it appears extreamly indecent. Their dreſs conſiſts of a pair of ſhoes, a ſhift, a petticoat of dimity, an open petticoat, and a jacket, which in ſummer, is of linen, in winter of ſtuff. To this ſome add a mantelette, that the former may hang looſe. The difference between this dreſs and that worn at Quito, though conſiſting of the ſame pieces is, that at Lima it is much ſhorter, the petticoat which is uſually tied below the waiſt, not reaching lower than the calf of the leg, from whence, nearly to the ancle, hangs a border of very fine lace, ſewed to the bottom of the under petticoat; through which the ends of their garters are diſcovered, embroidered with gold or ſilver, and ſometimes ſet with pearls; but the latter is not common. The upper petticoat, which is of velvet, or ſome rich ſtuff, is fringed all round, and not leſs crowded with ornaments, than thoſe deſcribed in the firſt volume of this work. But be the ornaments what they will, whether of fringe, lace, or ribbands, they are always exquiſitely fine. The ſhifts ſleeves, which are a yard and a half in length, and two yards in width, when worn for ornament, are covered with rolls of laces, variegated in ſuch a manner as to render the whole truly elegant. Over the ſhift is worn the jacket, the ſleeves of which are exceſſively large, of a circular figure, and conſiſt of rows of lace, or ſlips of cambrick or lawn, with lace diſpoſed betwixt each, as are alſo the ſhift ſleeves, even of thoſe who do not affect extraordinary ornament. The body of the jacket is tied on the ſhoulders with ribbands faſtened to the back of their ſtays; and the round ſleeves of it being tucked up to the ſhoulders, are ſo diſpoſed together with thoſe of the ſhift, as to form what may be term'd four wings. If the jacket be not buttoned or claſped before; it is agreeably faſtened on the ſhoulders; and indeed the whole dreſs makes a moſt elegant figure. They who uſe a cloſe veſt, faſten it with claſps, but wear over it the looſe jacket, already deſcribed. In the ſummer they have a kind of veil, the ſtuff and faſhion of which is like that of the ſhift and body of the veſt, of the fineſt cambrick or lawn, richly laced: But in winter the veil worn in their houſes is of bays; when they go abroad full dreſſed, it is adorned like the ſleeves. They alſo uſe brown bays, finely laced and fringed, and bordered with ſlips of black velvet. Over the petticoat is an apron of the ſame ſtuff as the ſleeves of the jacket, hanging down to the bottom of it. From hence ſome idea may be formed of the expence of a dreſs, where the much greater part of the ſtuff is merely for ornament; nor will it appear ſtrange, that the marriage ſhift ſhould coſt a thouſand crowns, and ſometimes more.

One particular on which the women here extreamly value themſelves, is the ſize of their feet, a ſmall foot being eſteemed one of the chief beauties; and this is the principal fault they find with the Spaniſh ladies, who have much larger feet than thoſe of Lima. From their infancy they are accuſtomed to wear ſtreight ſhoes, that their feet may not grow beyond the ſize of which they eſteem beautiful; ſome of them do not exceed five inches and a half, or ſix inches in length, and in women of a ſmall ſtature they are ſtill leſs. Their ſhoes have little or no ſole, one piece of Cordovan ſerving both for that and the upper leather, and of an equal breadth and roundneſs at the toe and heel, ſo as to form a ſort of long figure of eight; but the foot not complying with this figure, brings it to a greater regularity. Theſe ſhoes are always faſtened with diamond buckles, or ſomething very brilliant in proportion to the ability of the wearer, being worn leſs for uſe than ornament; for the ſhoes are made in ſuch a manner, that they never looſen of themſelves, nor do the buckles hinder their being taking off. It is unuſual to ſet theſe buckles with pearls, a particular to be accounted for, only from their being ſo laviſh of them in the other ornaments of dreſs, as to conſider them as of too little value. The ſhoemakers, who are no ſtrangers to the foible of the ſex, take great care to make them in a manner very little calculated for ſervice. The uſual price is three half crowns a pair; thoſe embroidered wind gold or ſilver coſt from eight to ten crowns. The latter however, are but little worn, the encumbrance of embroidery being ſuited rather to enlarge than dimiſh the appearance of a ſmall foot.*

They are fond of white ſilk ſtockings, made extreamly thin, that the leg may appear the more ſhapely; the greateſt part of which is expoſed to view. Theſe trifles often afford very ſprightly ſallies of wit in their animadverſions on the dreſs of others.

Hitherto we have conſidered only the more common dreſs of theſe ladies; the reader will conceive a ſtill higher idea of their magnificence, when he is informed of the ornaments with which they are decorated in their viſits, and upon public occaſions. We ſhall begin with their manner of dreſſing the hair, which being naturally black, and capable of reaching below their waiſts, they diſpoſe in ſuch a manner as to appear perfectly graceful. They tie it up behind in ſix braided locks, through which a golden bodkin a little bent is inſerted, and having a cluſter of diamonds at each end. On this the locks are ſuſpended ſo as to touch the ſhoulder. On the front and upper part of the head they wear diamond egrets, and the hair is formed into little curls, hanging from the forehead to the middle of the ear, with a large black patch of velvet on each temple. Their ear-rings are of brilliants, intermixed with tuffs of black ſilk, covered with pearls, reſembling thoſe already deſcribed in the firſt volume. Theſe are ſo common an ornament, that beſides their necklaces, they alſo wear about their neck roſaries, the beads of which are of pearls, either ſeparate or ſet in cluſters to the ſize of a large filbert; and thoſe which form the croſs are ſtill larger.

Besides diamond rings, necklaces, girdles, and bracelets, all very curious both with regard to water and ſize, many ladies wear other jewels ſet in gold, or for ſingularity ſake, in tombago. Laſtly, from their girdle before is ſuſpended a large round jewel enriched with diamonds; much more ſuperb than their bracelets, or other ornaments. A lady covered with the moſt expenſive lace inſtead of linen, and glittering from head to foot with jewels, is ſuppoſed to be dreſſed at the expence of not leſs than thirty or forty thouſand crowns. A ſplendor ſtill the more aſtoniſhing, as it is ſo very common.

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* All thoſe who can afford them wear ſhoes made in the European manner, but with heels of wrought ſilver; the tinkling of which, added to the ſmallneſs of their feet, has really, at leaſt to the weather beaten ſailor, ſomething captivating. A.

A fondneſs for expence in theſe people, does not confine itſelf to rich apparel; it appears no leſs in the ſtrange neglect, and the ſmall value they ſeem to ſet upon them, by wearing them in a manner the moſt careleſs, and by that means bringing upon themſelves freſh expences in repairing the old or purchaſing new jewels; eſpecially pearls on account of their fragility.

The moſt common of the two kinds of dreſſes worn when they go abroad, is the veil and long petticoat; the other is a round petticoat and mantelet. The former for church, the latter for taking the air, and diverſions; but both in the prevailing taſte for expence, being richly embroidered with ſilver or gold.

The long petticoat is particularly worn on holy Thurſday; as on that day they viſit the churches, attended by two or three female negro or mulatto ſlaves, dreſſed in an uniform like pages.*

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* The lower claſs of women whoſe whole ſtock of apparel ſeldom conſiſts of more than two camiſas [ſhifts] and a ſaya [pettycoat] wear bracelets, roſaries, and ſmall golden images about their necks and arms, to the intrinſic value of 50 or 60 crowns, and to them of much greater value, having coſt near that ſum in benediction from the prieſts, without which the images, &c. would be eſteemed pollutions. A

WITH regard to the perſons of the women of Lima, they are, in general, of a middling ſtature, handſome, genteel, and of very fair complexions without the help of art; the beauty of their hair, has been already mentioned, but they have uſually an enchanting luſtre and dignity in their eyes.

THESE perſonal charms are heightened by thoſe of the mind, clear and comprehenſive intellects, an eaſineſs of behaviour, ſo well tempered, that whilſt it invites love, it commands reſpect; the charms of their converſation are beyond expreſſion; their ideas juſt, their expreſſions pure, their manner inimitably graceful. Theſe are the allurements by which great numbers of Europeans, forgetting the fair proſpects they have at home, are induced to marry and ſettle here.

ONE material objection againſt them is, that being too well acquainted with their own excellencies, they are tainted with a haughtineſs, which will ſcarce ſtoop to the will of their huſbands. Yet by their addreſs and inſinuating compliance, they ſo far gain the aſcendency over them, as to be left to their own diſcretion. There may indeed, a few exceptions be found; but theſe poſſibly are rather owing to a want of capacity. Another objection may be made to their being more expenſive than other ladies: but this ariſes from the exorbitant price of ſtuffs, laces, and other commodities, in this country. And with regard to the independence they affect, it is no more than a cuſtom long eſtabliſhed in the country. To which may be added, that being natives, and their huſbands generally foreigners, it is very natural, that the latter ſhould not enjoy all that authority, founded on laws ſuperior to cuſtom; and hence this error remains uncorrected. The huſbands conform to the manners of the country, as their character is not in the leaſt affected thereby; and this complaiſance is rewarded by the diſcretion and affection of their ladies, which are not to be paralleled in any other part of the world.

They are ſo exceſſively fond of perfumes, that they always carry ambergriſe about them; putting it behind their ears, and other parts of the body; and alſo in ſeveral parts of their cloaths. Not content with the natural fragrancy of flowers, which are alſo a favourite ornament, they ſcatter perfumes even on their noſegays. The moſt beautiful flowers they place in their hair, and others, which are moſt valuable for their odour they ſtick in their ſleeves; the effluvia therefore iſſuing from theſe ladies, the reader will conceive to reach to no inconſiderable diſtance. The flower moſt in uſe is the Chirimoya, of mean appearance, but of exquiſite ſcent.

To this paſſion for flowers it is owing, that the grand ſquare, every morning, on account of the vaſt quantity of beautiful vegetables brought thither, has the appearance of a ſpacious garden. The ſmell and the ſight are there ſufficiently gratified. The ladies reſort thither in their calaſhes, and if their fancy happens to be pleaſed, they make but little difficulty with regard to the price. A ſtranger has the pleaſure of ſeeing aſſembled here not only the ladies, but every body of rank whoſe health and avocations will admit of it.

The lower claſſes of women, even to the very negroes, affect, according to their abilities, to imitate their betters, not only in the faſhion of their dreſs, but alſo in the richneſs of it. None here are ſeen without ſhoes as at Quito, but they are made of ſo ſmall a ſize, in order to diminiſh the natural bigneſs of the feet, that they muſt give infinite uneaſineſs in the wearing. A deſire of being diſtinguiſhed by an elegant dreſs is univerſal. Their linen is always ſtarch'd to a great degree, in order to diſplay the coſtly patterns of their laces. After this univerſal paſſion, their next care, and indeed a much more commendable one, is cleanlineſs; of which the uncommon neatneſs of their houſes are ſufficient inſtances.

They are naturally gay, ſprightly, and jocoſe, without levity; remarkably fond of muſick; ſo that even among the loweſt you are entertained with pleaſing and agreeable ſongs; for the gratification of this paſſion, they have in general good voices, and ſome of them are heard with admiration. They are very fond of balls, where they diſtinguiſh themſelves equally by the gracefulneſs and agility of their motions. In fine, the reigning paſſions of the fair at Lima, are ſhew, mirth, and feſtivity.

The natural vivacity and penetration of the inhabitants of Lima, both men and women, are greatly improved by converſing with perſons of learning reſorting thither from Spain. The cuſtom of forming ſmall aſſemblies, has alſo a great tendency to improve their minds, and give them a ready and happy manner of expreſſion, from an emulation to diſtinguiſh themſelves in theſe engaging accompliſhments.

Tho' the natives have too great a ſhare of pride, they are not wanting in docility when proper methods are taken. They inſtantly ſhew their reluctance to obey a command given with haughtineſs; but, when delivered with mildneſs and affability, equally obſequious and ſubmiſſive. They are charmed with gentleneſs of manners; and a few inſtances of kindneſs make a laſting impreſſion on their minds. They are remarkably brave, and of ſuch unblemiſhed honour, as never to diſſemble an affront received, or give one to others; ſo that they live together in a chearful and ſocial manner. The Mulattoes being leſs civilized, and having but ſlender notions of the turpitude of vice, and the importance of virtue, are haughty, turbulent and quarrelſome. Yet the miſchievous conſequences of theſe vices are leſs common, than might naturally be expected in ſuch a populous city.

The manners and diſpoſitions of the nobility, correſpond with their rank and fortune. Courteſy ſhines in all their actions, and their complaiſance to ſtrangers is without limits. The reception they give them, is equally free from flattery and a haughty reſerve; ſo that all the Europeans, whether they viſit them out of curioſity or from commercial motives, are charmed with their probity, politeneſs, candour, and magnificence.

CHAP. VI.

Of the Climate of the City of LIMA, *and the whole Country of* VALLES: *And the diviſions of the ſeaſons.*

THE temperature of the air of Lima, and its alterations, would be greatly injured, by an inference drawn from what is felt in the ſame degree of north latitude; as Lima would from thence be concluded another Carthagena; the latitude of both cities, one in the northern and the other in the ſouthern hemiſphere, differing but very little; whereas in fact it is quite the reverſe. For as that of Carthagena is hot to a degree of inconvenience, this of Lima is perfectly agreeable. And tho' the difference of the four ſeaſons are ſenſible, all of them are moderate, and none of them troubleſome.

Spring begins towards the cloſe of the year, that is, towards the end of November, or beginning of December. But is to be underſtood only of the heavens, as then the vapours which filled the atmoſphere during the winter ſubſide, the ſun to the great joy of the inhabitants again appears, and the country now begins to revive, which during the abſence of his rays had continued in a ſtate of languor. This is ſucceeded by ſummer, which, tho' hot from the perpendicular direction of the ſun's rays, is far from being inſupportable; the heat, which would indeed otherwiſe be exceſſive, being moderated by the ſouth-winds, which at this ſeaſon always blow, tho' with no great force. At the latter end of June, or the beginning of July, the winter begins, and continues till November or December, the autumn intervening between both. About this time the ſouth winds begin to blow ſtronger, and bring the cold with them; not indeed equal to that in countries where ſnow and ice are known, but ſo keen that the light dreſſes are lain by, and cloth or other warm ſtuffs worn.

There are two cauſes of the cold felt in this country, and nature, wiſe in all her ways, provides others which produce the ſame effect at Quito. The firſt cauſe of cold at Lima is the winds, which paſſing over the frozen climes of the ſouth pole, bring hither part of the frigorific particles from thoſe gelid regions; but as a ſufficient quantity of theſe could not be brought over ſuch an immenſe ſpace as lies between the frozen and torrid zones of its hemiſphere, nature has provided another expedient: during the winter, the earth is covered with ſo thick a fog, as totally to intercept the rays of the ſun; and the winds, by being propagated under the ſhelter of this fog, retain the particles they contracted in the frozen zone. Nor is this fog confined to the country of Lima, it extends, with the ſame denſity, northward thro' all the country of Valles, at the ſame time filling the atmoſphere of the ſea; as will be ſhewn hereafter.

This fog ſeldom fails daily to cover the earth, with a denſity that obſcures objects at any diſtance: About 10 or 11 it begins to riſe, but without being totally diſperſed, tho' it is then no impediment to the ſight, intercepting only the rays of the ſun by day, and by night thoſe of the ſtars; the ſky being continually covered whatever height the vapours float at in the atmoſphere. Sometimes, indeed, they are ſo far diſperſed as to admit of ſeeing the diſk of the ſun, but ſtill precluding the heat of his rays.

It is not unworthy obſervation on this head, that at the diſtance only of two or three leagues, the vapours are much more diſſipated from noon to evening than in the city, the ſun fully appearing ſo as to moderate the coldneſs of the air. Alſo at Callao, which is only two leagues and a half from Lima, the winter is much more mild, and the air clearer, during that ſeaſon, for the days at Lima, are very melancholy and diſagreeable, not only on account of the darkneſs, but frequently during the whole day the vapours continue in the ſame degree of denſity and poſition, without breaking, or being elevated above the earth.

It is in this ſeaſon only that the vapours diſſolve into a very ſmall miſt or dew, which they call garua, and thus every where equally moiſtens the earth; by which means all thoſe hills, which during the other part of the year offer nothing to the ſight but rocks and waſtes, are cloathed with verdure, and enamelled with flowers of the moſt beautiful colours, to the great joy of the inhabitants, who, as ſoon as the ſeverity of winter is abated, reſort into the country, which exhibits ſo elegant an appearance.* Theſe garuas or dews never fall in quantities ſufficient to damage the roads, or incommode the traveller; a very thin ſtuff will not ſoon be wet through; but the continuance of the miſts during the whole winter without being exhaled by the ſun, renders the moſt arid and barren parts fertile. For the ſame reaſon they turn the diſagreeable duſt in the ſtreets of Lima into a mud, which is rather more offenſive.

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* I cannot underſtand what the Author means here by "ſeverity of the winter," unleſs he would ſo denominate the moſt pleaſant time of the year; for during this time, while the ſuns rays are cut off by the miſts, there is a continual ſpring; and plants and herbs recruit their ſtrength to endure the perpendicular rays of the ſun, which break through the miſts about the middle of November. A.

THE winds which prevail during the winter, are nearly, though not exactly ſouth; ſometimes ſhifting a little to the S. E. between which and the ſouth they always blow.* This we obſerved to have conſtantly happened during the two winters we ſpent in this country, one at Lima, and the other at Callao; the former in the year 1742, and the latter in 1743. The firſt was one of the moſt ſevere that had been felt, and the cold general in all that part of America to Cape Horn. In Chili, Baldivia, and Chiloe, the cold was proportionable to the latitudes; and at Lima it occaſioned conſtipations and fluxions, which ſwept away ſuch numbers, that it ſeemed to reſemble a peſtilence. And though diſorders of this kind are very common in the winter ſeaſon, they are rarely attended with the danger which then accompanied them.

THE extraordinary ſingularity obſerved in the kingdom of Peru, namely, that it never rains; or to ſpeak more properly, that the clouds do not convert themſelves into formal ſhowers, has induced many naturaliſts to enquire into the cauſe; but in their ſolutions of this difficulty they have varied, and invented ſeveral hypotheſes to account for ſo ſtrange an effect. Some attribute it to the conſtancy of the ſouth winds, concluding, that as they are inceſſant, they propel the vapours riſing from the ſea, to the ſame point; and thus by never reſting in any part, as no oppoſite winds blow during the whole year to check their courſe, there is not time ſufficient for the miſts to collect themſelves, and, by an increaſe of gravity to deſcend in the manner of rain. Others have attributed it to the natural cold brought by the ſouth wind, which continue the atmoſphere in a certain degree of heat during the whole year, and thus increaſe the magnitude of the particles of the air, which with the nitrous effluvia acquired in its paſſage over the ſurface of the ſea, together with thoſe of the ſeveral minerals with which this country abounds, leſſen its velocity, and conſequently its power of uniting the vapours ſo as to form drops, whoſe gravity is greater than that of the air. To this we may add, that the rays of the ſun not exerting a force ſufficient for uniting and putting them in motion, the heat being greatly leſſened by the coldneſs of the wind, the fog cannot be converted into drops of rain. For while the weight of the cloud does not exceed that of the air, by which it is ſupported, it cannot precipitate.

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* The wind here blows S. by E. to S by W. but generally about S. S. E. from June to December. A.

I SHALL not cenſure this, or any other hypotheſis, formed for explaining the above phænomenon, not being certain that I have myſelf diſcovered the true cauſe; I ſhall however give the reader my thoughts, and leave them to the diſcuſſion of philoſophers. In order to this I ſhall lay down ſome preliminary principles, which may ſerve as a foundation to thoſe who ſhall apply themſelves to diſcover the true cauſe of this phænomenon, with ſome inſtructions for judging of the ſeveral hypotheſis that have been formed on this extraordinary ſubject.

1, IT is to be ſuppoſed, that throughout the whole country of Valles, no other winds are known during the whole year, than the ſoutherly, that is, between the S. and S. E. and this not only on the land, but alſo to a certain diſtance at ſea; it evidently appearing that the winds are limited between the S. and S. E. It is therefore very ſtrange that ſome writers ſhould aſſert that they are confined between the S. and S. W. as this is abſolutely falſe. There are indeed intervals when theſe winds are ſcarce felt, and an air, tho' extreamly ſmall, ſeems to come from the north, and which forms the fog. 2. In winter the S. wind blows harder than in ſummer, eſpecially near the ſurface of the earth. 3. Tho' no formal rain is ever known in the country of Valles, there are wetting fogs called Garuas, which continue the greateſt part of the winter; but are never ſeen in ſummer. 4. When the Garuas fall, it is obſerved that the clouds, miſt, or vapours, which riſe from the earth, remain almoſt contiguous to its ſurface; and the ſame fog which is converted into a Garua, begins by a moiſt air, till the humidity gradually increaſing to its greateſt condenſation, the ſmall drops which fall, are eaſily diſtinguiſhable. This is ſo natural, that it is known in all other countries ſubject to any degree of cold, and, conſequently, not to be wondered at in this.

I give the name of cloud, miſt, or vapours, to that which produces the Garua or ſmall rain; for though there may be ſome accidental diſtinctions between theſe three kinds, they are not ſuch as cauſe any material difference: the fog being only the vapour condenſed more than when it firſt roſe; and the cloud only a fog elevated to a greater height, and ſtill more condenſed than the former: ſo that in reality they may all be conſidered as one and the ſame thing, differing only in degrees of denſity, and therefore it is of little importance whatever name it is called by.

5. The rays of the ſun during the ſummer, cauſe a prodigious heat all over Valles, and the more ſo as they are received upon a ſandy ſoil, whence they are ſtrongly reverberated, the winds being at the ſame time very weak. Hence it appears, that the ſecond hypotheſis above related, is not founded

on truth; for if the force or agitation of the ſouth winds be the cauſe which hinders the vapours from riſing to the height neceſſary for forming rain, this cauſe generally ceaſing in the ſummer, the rain might be expected to deſcend; whereas quite the reverſe happens, the Garuas being then much leſs common. 6. Particular times have been known when the nature of the country departing as it were from its uſual courſe, formal ſhowers have fallen, as we have already mentioned (chap. i.) in deſcribing the towns of Chocope, Truxillo, Tumbez, and other places; but with this ſingularity, that the winds continued at ſouth, and blew much ſtronger during the time of the rain, than is uſual either in winter or ſummer.

These ſix preliminary principles are ſo common to this climate, that they may be applied to all the places mentioned in this chapter; and are the only guides that muſt be followed in determining the true cauſe why it does not rain in Peru as in Europe, or, more properly, as is common in the torrid zone.

It will readily be granted, that the wind blows more ſtrongly in ſome regions of the atmoſphere than in others; experience itſelf having ſufficiently proved this to be fact: as on high mountains, along whoſe ſummits a ſtrong wind is felt, when at the foot, hardly any can be perceived; at leaſt we found this to be the caſe in all the mountains of the Cordilleras, one of the greateſt inconveniences to us being the ſtrength of the wind. And indeed this is every where ſo common, that any perſon may be convinced of it by only aſcending a high tower, when he will ſoon perceive the difference between the ſtrength of the wind at the top and at the bottom. I am not ignorant that ſome have endeavoured to prove, that on the land this proceeds from the inequalities of its ſurface, which hinder the winds from blowing in the plains or low countries with that force which is felt on eminences; but the ſame thing happening at ſea, as experience has abundantly proved, it appears beyond diſpute, that the ſurface is not the place where the wind exerts its greateſt force. This being granted, it may be confidently aſſerted, that the ſouth winds blow with the greateſt force in a portion of the atmoſphere at ſome diſtance from the earth; but not generally higher than that in which the rain is formed; or where the aqueous particles unite ſo as to form drops of any ſenſible gravity or magnitude. In this country therefore the clouds or vapours elevated above this ſpace, that is, thoſe which have the greateſt degree of altitude, move with a much leſs velocity than the winds under them. Nor is it uncommon in other climates, beſides that of Valles, for theſe clouds to move in a direction contrary to the more denſe ones below it. Thus it appears to me, that without the danger of advancing irregular ſuppoſitions, the ſpace of the atmoſphere, where the winds generally blow with the greateſt force, is that where the large drops commonly called rain, are formed.

Now in order to explain the ſingularity of this remarkable phænomenon, I conceive that in ſummer, when the atmoſphere is moſt rarified, the ſun, by the influence of his rays, proportionally elevates the vapours of the earth, and gives them a greater degree of rarifaction; for his beams being then in a more perpendicular direction to the earth, they have the power of raiſing them to a greater height. Theſe vapours on their touching the lower part of the atmoſphere, where the winds blow with the greateſt force, are carried away before they can riſe to the height required for uniting into drops, and conſequently no rain can be formed. For as the vapours iſſue from the earth, they are wafted along the lower region of the atmoſphere, without any ſtop; and the winds blowing always from the ſouth, and the vapours being rarified proportionally to the heat of the ſun, its too great activity hinders them from uniting. Hence in ſummer the atmoſphere is clear, or free from vapours.

In winter the rays of the ſun being leſs perpendicular to the ſurface of the earth, the atmoſphere becomes conſiderably more condenſed, but the winds from the ſouth much more ſo, as being loaded with the frigorific particles from the frozen zone, which particles it communicates to the vapours as they iſſue from the earth; and conſequently renders them much more condenſed than in ſummer: hence they are hindered from riſing with the ſame celerity as before.

To theſe muſt be added two other reaſons, one, that the rays of the ſun for want of ſufficient activity diſſipates the vapours leſs, ſo that they riſe much ſlower. The other, that the region where the wind has its greateſt velocity being, in this ſeaſon, near the earth, will not admit of their riſing to any height; and thus they continue contiguous to its ſurface, where they ſtill follow the ſame direction, and form the moiſt fog then felt; and having leſs ſpace to dilate themſelves than at a greater height, they, conſequently, ſooner come into contact, and when ſufficiently condenſed, deſcend in a Garua.

In the middle of the day the garua ceaſes, being then diſperſed, which proceeds from the ſun's rarifying the atmoſphere, whence the vapours aſcend and remain ſuſpended at a greater height, and thus they are rendered more tenuious, and being raiſed to a region where they have more room to dilate, they are ſo far diſperſed as to become imperceptible.

After all, it muſt be owned that both in ſummer and winter, ſome vapours muſt ſurmount the difficulty of the wind in that region where its velocity is greateſt, and getting above it aſcend to a greater height; though not indeed in the very part where they firſt reached this current of wind, but at ſome diſtance from it; ſo that theſe vapours are to be conſidered, on one hand, as yielding to the current of the air, and, on the other, as aſcending in proportion to the rarefaction they have received from the rays of the ſun. Hence it follows, that theſe vapours cannot be thoſe which are moſt condenſed, as the difficulty of riſing is always proportional to the degree of condenſation; and at the ſame time their magnitude would render them more ſuſceptible of the impulſe of the wind. So that theſe conſequently being the moſt ſubtile or tenuious, on having paſſed that region, the celerity with which they were before carried upwards is decreaſed, and great numbers of them being united from that lofty miſt which is ſeen after the cloud is totally diſſipated. This miſt cannot be converted into rain; for having paſſed above the region proper for its formation, all the parts become congealed, and their weight can never be increaſed ſufficiently to overcome the reſiſtance of the air which ſupports them; for the quantity of thoſe which have overcome this obſtacle being inconſiderable, they cannot be united with a ſufficient quantity of others to withſtand the continual diſſipation occaſioned by the action of the rays of the ſun. Nor can they deſcend in either ſnow or hail, as might be expected from their preſent ſtate. Beſides following always, tho' with leſs velocity, the current of the wind, any ſuch concretion of them as to form a thick cloud is prevented; for as we have already obſerved, theſe miſts are ſo tenuious, as to afford in the day time a confuſed view of the diſk of the ſun, and of the ſtars in the night.

In order to render the premiſes agreeable to obſervation, one difficulty ſtill remains, namely, that thoſe lofty miſts are ſeen only in winter, and not in ſummer. But this, in my opinion, muſt naturally be the conſequence; for beſides the general reaſon that the ſtronger influence of the rays of the ſun diſperſes them, it proceeds from the increaſe of the force of the winds during the winter, in a region nearer the earth than in ſummer; and the nearer the lower part of this region is to the ſurface of the earth, the nearer alſo will be the upper part; while, on the contrary, in the ſummer, the higher the lower part of this current of air is, the higher will be alſo its upper part; and, as we muſt ſuppoſe, with all philoſophers, that the vapours of the earth can aſcend only to that height, where the gravity of the particles of the vapours are equal to thoſe of the air; and the rapidity of the wind extending in ſummer to theſe limits, they are conſequently involved in its violent impulſe; and thence there cannot be ſuch a multitude of conglomerations as to form the miſt ſo common in winter; for the winds in this ſeaſon ſtrongly blowing through a region nearer the earth, the agitation in the upper parts is proportionally leſs. And this current of air being below the region to which vapours can aſcend, the ſpace intercepted between the upper part of this current, and the part to which vapours riſe, becomes filled with them. All this ſeems natural, and is confirmed by experience; for in winter the ſouth winds are ſtronger on the land than in ſummer. But as a further proof may be thought neceſſary, I have added the following.

It has been ſaid that in the town of Chocope, two very hard and continual rains have happenned; and that the ſame thing is more frequently ſeen at Tumbez, and other towns of thoſe parts, after ſome years of continual drought, which ſeems ſtrange; for that being in the country of Valles, and not at all different from Lima, no rain would naturally be expected there. Two cauſes for this, however, have occurred to me, one of them flowing from the other. I ſhall begin with the firſt as productive of the ſecond.

FROM what has been ſaid, it may be inferred, that in a country or climate, where one and the ſame wind perpetually prevails, there can be no formal rain; and in order to form it, either the wind muſt entirely ceaſe, or an oppoſite wind muſt ariſe, which by checking the courſe of the vapours, brings them into contact with thoſe lately exhaled from the earth, and cauſes them to condenſe in proportion as they riſe by the attraction of the ſun, till being rendered heavier than the air by which they were ſupported, they deſcend in drops of water.

ON re-conſidering the circumſtances of what happened at Chocope, it will appear, that during the whole day, the ſky was clear, and that it was not before five in the evening that the rain began, and with it the violence of the wind. It ſhould alſo be obſerved that in the time of the Briſas in thoſe climates where they are periodical, they blow ſtrongeſt between the ſetting and riſing of the ſun; and this happening in September and the following months, forms the ſummer in Valles, when they enjoy clear days and a lucid atmoſphere. This was the caſe at Chocope at the time of that rain; for tho' the inhabitants did not preciſely mention the ſeaſon in which that event happened, yet the ſeveral particulars related, eſpecially that the ſouth winds then prevailed with an uncommon force, ſufficiently indicate that it was in the ſummer; as this would not have been at all remarkable in winter, when they are very variable and ſometimes ſtormy. It may therefore be ſafely concluded that theſe events happened during the ſummer; and, by way of corollary, that the Briſas being ſtronger than uſual, and advancing ſo far on the continent as even to reach the ſouth winds, they were overpowered by them, and ſhifted their point; but the ſucceeding ſouth winds rendering it impoſſible to return in the ſame place, they left their former region and blew in a current nearer the earth. By which means the vapours which had been exhaling during the whole day, after being carried by the ſtrongeſt current of wind to a certain diſtance, aſcended to the region where the Briſas prevailed; and being there repelled by them, had time to condenſe; for being within that region where the rain is formed, or where many imperceptible drops compoſe one of a larger magnitude and gravity, and being more minutely divided by the influence of the ſun they continued to aſcend, till that power ceaſing by the ſetting of the ſun, they again condenſed, and their weight becoming too heavy to be ſupported in the air, they deſcended in rain, which was the more violent as the vapours were ſtrongly repulſed by the Briſas. At the dawn, theſe winds as uſual, began to decreaſe, and the rain gradually leſſened. The ſouth winds blew all day as before; and there being then in the atmoſphere, no other winds to oppoſe them, they carried with them the vapours as they exhaled, and the atmoſphere continued clear and ſerene.

This happened at Chocope, ſituated at a much greater diſtance from the parts to which the Briſas extend than Tumbez, Piura, Sechura, and other towns where this is more frequent, as being nearer the equinoctial: notwithſtanding, no Briſas or north-winds are felt in that part of the atmoſphere near the ſurface of the earth. So that it is probable, or rether, indeed, evident from experience, that the north winds at the time they prevail, more eaſily reach to the countries neareſt the equinoctial, than to thoſe at a greater diſtance, though not ſo as to be felt in the atmoſphere near the earth, but in a more elevated region. Conſequently, it is natural for rains to be more frequent in the former than in the latter, where theſe winds very ſeldom reach, whether in that part of the atmoſphere contiguous to the earth, or another, which being more diſtant from it they blow there more violently.

I AT firſt declared againſt any poſitive aſſertion, that the opinion I have now laid before the reader, is founded on ſuch undoubted phyſical principles, that no other can be advanced more conformable to phænomena; it being difficult immediately to fix on cauſes which agreeing with all circumſtances, leaves the mind entirely ſatisfied: And as all within the reach of human perſpicuity cannot be accommodated to every particular, as entire conviction requires, let it ſuffice that I have here delivered my thoughts; leaving the naturaliſts at full liberty to inveſtigate the true cauſe, and when diſcovered, to reject my hypotheſes.*

As rain is ſeldom or never ſeen at Lima, ſo that place is alſo equally free from tempeſts; that thoſe who have neither viſited the mountains nor travelled into other parts, as Guayaquil or Chili, are abſolute ſtrangers to thunder and lightning; nothing of that kind being known here. Accordingly, the inhabitants are extreamly terrified when they firſt hear the former or ſee the latter. But it is very remarkable, that what is here entirely unknown, ſhould be ſo common at thirty leagues diſtant, or even leſs, to the eaſt of Lima; it being no farther to the mountains, where violent rains and tempeſts are as frequent as at Quito. The winds, tho' ſettled in the above-mentioned points, are ſubject to variations, but almoſt imperceptible, as we ſhall explain. They are alſo very gentle, and even in the ſevereſt winters, never known to do any damage by their violence; ſo that if this country was free from other inconveniences and evils, its inhabitants could have nothing to deſire, in order to render their lives truly agreeable. But with theſe ſignal advantages, nature has blended inconveniences, which greatly diminiſh their value; and reduce this country even below thoſe, on which nature has not beſtowed ſuch great riches and fertility.

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* A more probable conjecture is, that the vapours which ariſe in the great South-Sea, and are brought into this neighbourhood by the ſouth wind (where they would naturally condenſe into clouds and fall in ſhowers) are attracted by the Cordilleras, whoſe tops are generally inveloped in clouds frightful to behold, which ſpend themſelves in tremendous tempeſts, even ſhaking the foundations of thoſe lofty mountains. A.

It has been obſerved, that the winds generally prevailing in Valles, throughout the whole year, comes from the ſouth; but this admits of ſome exceptions, which, without any eſſential alteration, implies that ſometimes the winds come from the north, but ſo very faint, as ſcarcely to move the vanes of the ſhips, and conſiſt only of a very weak agitation of the air, juſt ſufficient to indicate that the wind is changed from the ſouth. This change is regularly in winter, and with it the fog immediately begins, which in ſome meaſure ſeems to coincide with what has been offered with regard to the reaſon why ſhowers are unknown at Lima. This breath of wind is ſo particular, that from the very inſtant it begins, and before the wind is condenſed, the inhabitants are unhappily ſenſible of it by violent head achs, ſo as eaſily to know what ſort of weather is coming on before they ſtir out of their chambers.

CHAP. VII.

Inconveniences, Diſtempers, and Evils, to which the City of LIMA *is ſubject; particularly Earthquakes.*

ONE of the Inconveniences of Lima, during the ſummer, is that of being tormented with fleas and bugs, from which the utmoſt care is not ſufficient to free the inhabitants. Their prodigious increaſe is partly owing to the duſt of that dung, with which the ſtreets are continually covered; and partly to the flatneſs of the roofs, where the ſame duſt, wafted thither by the winds, produce theſe troubleſome inſects, which are continually dropping thro' the crevices of the boards into the apartments, and by that means render it impoſſible for the inhabitants, notwithſtanding all their pains, to keep their houſes free from them. The moſchitos are very troubleſome, but much leſs ſo than the former.

THE next, and indeed a moſt dreadful circumſtance, is that of earthquakes, to which this country is ſo ſubject, that the inhabitants are under continual apprehenſions of being, from their ſuddenneſs and violence, buried in the ruins of their own houſes. Several deplorable inſtances of this kind have happened in this unfortunate city; and lately proved the total deſtruction of all its buildings. Theſe terrible concuſſions of nature are not regular, either with regard to their continuance or violence. But the interval between them is never of a length ſufficient to obliterate the remembrance of them. In the year 1742 I had the curioſity to obſerve the diſtance of time between thoſe which happened ſucceſſively for a certain ſpace. 1. On the 9th of May at three quarters after nine in the morning. 2. The 19th of the ſame month at midnight. 3. The 27th at 35 minutes after three in the evening. 4. The 12th of June at three quarters paſt five in the morning. 5. The 14th of October at nine at night; all which I carefully noted. And it muſt be obſerved that theſe concuſſions were the moſt conſiderable, and laſted near a minute; particularly that of the 27th of May, which continued near two minutes, beginning with one violent ſhock, and gradually terminating in tremulous motions. Between theſe above noted were ſeveral others, which I omitted, as being neither ſo laſting nor violent.

These earthquakes, tho' ſo ſudden, have their preſages, one of the principal of which is, a rumbling noiſe in the bowels of the earth, about a minute before the ſhocks are felt; and this noiſe does not continue in the place where it was firſt produced, but ſeems to pervade all the adjacent ſubterraneous parts. This is followed by diſmal howlings of the dogs, which ſeem to have the firſt perception of the approaching danger. The beaſts of burden paſſing the ſtreets, ſtop, and, by a natural inſtinct ſpread open their legs, the better to ſecure themſelves from falling. On theſe portents the terrified inhabitants fly from their houſes into the ſtreets with ſuch precipitation, that if it happens in the night, they appear quite naked; fear and the urgency of the danger, baniſhing at once all ſenſe of decency. Thus the ſtreets exhibit ſuch odd and ſingular figures, that might even afford matter for diverſion, were it poſſible, in ſo terrible a moment. The ſudden concourſe is accompanied with the cries of children waked out of their ſleep, blended with the lamentations of the women, whoſe agonizing prayers to the ſaints, increaſe the common fear and confuſion: The men alſo are too much affected to refrain from giving vent to their terror; ſo that the whole city exhibits one dreadful ſcene of conſternation and horror. Nor does this end with the ſhock, none venturing to return to their houſes thro' fear of a repetition, which frequently demoliſhes thoſe buildings which had been weakened by the firſt.

My attention to ſet down the exact time of the abovementioned ſhocks, taught me, that they happen indifferently at half ebb, or half flood; but never at high or low water; which ſufficiently confutes what ſome have confidently advanced, namely, that earthquakes always happen during the ſix hours of ebb, but never during the flood: becauſe this favours the hypotheſis they have advanced to account for their origin and cauſes; an hypotheſis which, in my opinion, does not ſo ſufficiently correſpond with obſervations, as to recommend itſelf to the aſſent of intelligent perſons.

The nature of this country is ſo adapted to earthquakes, that all ages have ſeen their terrible devaſtations; and that nothing may be wanting to ſatisfy the curioſity of the reader, I ſhall introduce the account of that which laid this large and ſplendid city totally in ruins, with a ſhort narrative of the moſt remarkable that have been felt in latter ages.

1. The firſt concuſſion ſince the eſtabliſhment of the Spaniards in theſe parts, happened in 1582, a few years after the foundation of Lima; but the damage was much leſs than in ſome of the ſucceeding, being chiefly confined to the city of Arequipa, which being ſituated near that ſpot, where the motion of the earth was moſt violent, the greateſt part of it was deſtroyed.

2. On the 9th of July 1586, Lima was viſited with another earthquake, and ſo violent, that even to this time it is ſolemnly commemorated on the day of the viſitation of Elizabeth.

3. In 1609, another like the former happened.

4. On the 27th of November 1630. ſuch prodigious damage was done in the city by an earthquake, and the intire ruin of it apprehended, that

in acknowledgement of its deliverance, a feſtival, called Nueſtra Senora del Milagro, is annually celebrated on that day.

5. In the year 1655, on the 3d of November, the moſt ſtately edifices, and a great number of houſes, were thrown down by an earthquake; the inhabitants fled into the country, and remained there ſeveral days, to avoid the danger they were threatened with in the city.

6. On the 17th of June 1678, another earthquake happened, by which ſeveral houſes were deſtroyed, and the churches conſiderably damaged.

7. One of the moſt dreadful of which we have any account, was that of the 20th of October, 1687. It began at four in the morning, with the deſtruction of ſeveral publick edifices and houſes, whereby great numbers of perſons periſhed; but this was little more than a preſage of what was to follow, and preſerved the greateſt part of the inhabitants from being buried under the ruins of the city. The ſhock was repeated at ſix in the morning with ſuch impetuous concuſſions, that whatever had withſtood the firſt, was now laid in ruins; and the inhabitants thought themſelves very fortunate in being only ſpectators of the general devaſtation from the ſtreets and ſquares, to which they have directed their flight on the firſt warning. During this ſecond concuſſion the ſea retired conſiderably from its bounds, and returning in mountainous waves, totally overwhelmed Callao, and the neighbouring parts, together with the miſerable inhabitants.

8. On the 29th of September, 1697, this place was viſited by another terrible earthquake.

9. On the 14th of July, 1699, a great number of houſes were deſtroyed by another concuſſion.

10. The 6th of February, 1716, a like diſaſter.

11. On the 8th of January, 1725, another.

12. On the 2d of December, 1732, was another earthquake at one in the morning.

13, 14, 15. In the years 1690, 1734, and 1745, three others happened, but neither violent nor laſting. But all theſe were leſs terrible than the laſt, as will appear from the following account of it.

16. On the 28th of October, 1746, at half an hour after ten at night five hours and three quarters before the full of the moon, the concuſſions began with ſuch violence, that in little more than three minutes, the greateſt part, if not all the buildings, great and ſmall in the whole city, were deſtroyed, burying under their ruins thoſe inhabitants who had not made ſufficient haſte into the ſtreets and ſquares; the only places of ſafety in theſe terrible convulſions of nature. At length the horrible effects of this firſt ſhock ceaſed; but the tranquility was of ſhort duration, concuſſions returning with ſuch frequent repetitions, that the inhabitants, according to the account ſent of it, computed two hundred in the firſt twenty-four hours, and to the 24th of February of the following year, 1747, when the narrative was dated, no leſs than four hundred and fifty ſhocks were obſerved, ſome of which, if leſs laſting, were equal to the firſt in violence.

The fort of Callao, at the very ſame hour ſunk into the like ruins; but what is ſuffered from the earthquake in its buildings, was inconſiderable, when compared with the terrible cataſtrophe which followed; for the ſea, as is uſual on ſuch occaſions, receding to a conſiderable diſtance, returned in mountainous waves foaming with the violence of the agitation, and ſuddenly turned Callao, and the neighbouring country into a ſea. This was not, however, totally performed by the firſt ſwell of the waves; for the ſea retiring further, returned with ſtill more impetuoſity; the ſtupendous water covering both the walls and other buildings of the place; ſo that whatever had eſcaped the firſt, was now totally overwhelmed by thoſe terrible mountains of waves; and nothing remained except a piece of the wall of the fort of Santa Cruz, as a memorial of this terrible devaſtation. There were then twenty-three ſhips and veſſels, great and ſmall, in the harbour, of which nineteen were abſolutely ſunk, and the other four, among which was a frigate called St. Fermin, carried by the force of the waves to a great diſtance up the country.

This terrible inundation extended to other ports on the coaſt, as Cavallos and Guanape; and the towns of Chancay, Guaura, and the valleys della Baranca, Sape, and Pativilca, underwent the ſame fate as the city of Lima. The number of perſons who periſhed in the ruin of that city, before the 31ſt of the ſame month of October, according to the bodies found, amounted to 1300; beſides the maimed and wounded, many of which lived only a ſhort time in torture. At Callao, where the number of inhabitants amounted to about 4000 two hundred only eſcaped; and twenty-two of theſe by means of the abovementioned fragment of a wall.

According to an account ſent to Lima after this accident, a volcano in Lucanas burſt forth the ſame night, and ejected ſuch quantities of water, that the whole country was overflowed; and in the mountain near Patas, called Converſiones de Caxamarquilla, three other volcanos burſt, diſcharging frightful torrents of water; like that of Carguayraſſo, mentioned in the firſt Vol. of this Work.

Some days before this deplorable event, ſubterraneous noiſes were heard at Lima, ſometimes reſembling the bellowing of oxen, and at others the diſcharges of artillery. And even after the earthquake they were ſtill heard during the ſilence of the night; a convincing proof that the inflammable matter was not totally exhauſted, nor the cauſe of the ſhocks abſolutely removed.

THE frequent earthquakes to which ſouth America, particularly Lima, and all the country of Valles is ſubject, opens a field for enquiry not leſs ample than that juſt mentioned, concerning their cauſes. Many hypotheſes have been formed by philoſophers; but the generality, and with the greateſt appearance of truth, agree in deducing them principally from the violent force of the air contained in ſulphureous ſubſtances and other minerals, and alſo that confined in the pores of the earth; which being too much compreſſed by the incumbent load, make a very violent reſiſtance. This is ſo far from implying any contradiction, that beſides being countenanced by reaſon, it is alſo confirmed by experience. But the apparent difficulty conſiſts in explaining how the vents of the earth become again filled with air, after one concuſſion has happened; it being natural to think, that the quantity which ſtruggled for vent, was thereby diſcharged, and that a long interval of time was neceſſary before another could be produced. Alſo why ſome countries are more ſubject to theſe terrible convulſions than others. Though this ſubject has been treated of by ſeveral authors, I think it my duty here to deliver the opinion which to me ſeems moſt probable.

EXPERIENCE has ſufficiently ſhewed, eſpecially in this country by the many volcanoes in the Cordilleras which paſs through it, that the burſting of a new burning mountain cauſes a violent earthquake, ſo as totally to deſtroy all the towns within its reach; as happened at the opening of the volcano in the deſart of Carguagoazo as mentioned in Vol. I. This tremulous motion, which we may properly call an earthquake, does not ſo uſually happen in caſe of a ſecond eruption, when an apperture has been before made; or, at leaſt, the motion it cauſes in the earth is comparatively but ſmall. Whence it is inferred that an aperture being once made, however the ſubſtances in the bowels of the mountain may take fire, the convulſion of the earth is ſeldom or never felt a ſecond time. The reaſon of which is, that the ſudden reiteration of this accident greatly augments the volume of the air by rarefaction, and as it finds an eaſy paſſage without labouring in the bowels of the earth for a vent, no other concuſſion is produced than what muſt follow from the eruption of a great quantity of air through an aperture too narrow for its volume.

The formation of volcanoes is now well known; and that they owe their origin to ſulphureous, nitrous, and other combuſtible ſubſtances in the bowels of the earth; for theſe being intermixed, and, as it were, turned into a kind of paſte by the ſubterraneous waters, ferment to a certain degree, when they take fire, and by dilating the contiguous wind or air, and alſo that within their pores, ſo that its volume is prodigiouſly increaſed beyond what it was before the inflammation, it produces the ſame effect as gunpowder, when fired in the narrow ſpace of a mine; but with this difference, that powder on being fired immediately diſappears, whereas the volcano being once ignited continues ſo till all the oleaginous and ſulphureous particles contained in the mountain are conſumed.

Volcanoes are of two kinds, contracted and dilated. The former are found where a great quantity of inflammable matter is confined in ſmall ſpace; the latter where theſe combuſtibles are ſcattered at a conſiderable diſtance from one another. The firſt are chiefly contained in the bowels of mountains, which may be conſidered as the natural depoſitaries of theſe ſubſtances. The ſecond may be conſidered as ramifications, which, tho' proceeding from the former, are, however, independent, extending themſelves under the plains, and traverſing them in ſeveral directions. This being admitted, it will appear, that in whatever country volcanoes, or depoſitaries of theſe ſubſtances, are very common, the plains will be more diverſified with theſe ramifications; for we are not to imagine that it is only within the boſoms of mountains that ſubſtances of this nature exiſt, and that they are not diſſeminated through all the parts of the adjacent region. Thus the country now under conſideration, abounding in theſe igneous ſubſtances more than any other, muſt, by the continual inflammation which neceſſarily follows their natural preparation for it, be more expoſed to earthquakes.

BESIDES the ſuggeſtions of natural reaſon, that a country containing many volcanoes muſt alſo be every where veined with ramifications of correſpondent ſubſtances, it is confirmed by experiment in Peru; where we find almoſt univerſally mines of nitre, ſulphure, vitriol, ſalt, bitumen, and other inflammatory ſubſtances, which ſufficiently confirm the truth of theſe inferences.

THE ſoil both of Quito and Valles, particularly the latter, is hollow and ſpongy, ſo as to be fuller of cavities or pores, than is uſually ſeen in that of other countries; and conſequently abounds with ſubterraneous waters. Beſides which, as I ſhall preſently ſhew more at large, the waters, from the ice continually melting on the mountains, being filtrated through theſe pores during their deſcent, penetrate deep into the cavities of the earth; and during their ſubterraneous courſe, moiſten, and turn into a kind of paſte, thoſe ſulphureous and nitrous ſubſtances; and though they are not here in ſuch prodigious quantities as in volcanoes, yet they are ſufficient, from their inflammatory quality, to rarify the air contained in them, which eaſily incorporating itſelf with that confined in the innumerable pores, cavities or veins of the earth, compreſſes it by its greater expanſion, and at the ſame time rarifies it by its heat; but the cavities, being too narrow to admit of its proper dilatation, it ſtruggles for a vent, and theſe efforts ſhake all the contiguous parts; till at laſt, were it finds the leaſt reſiſtance, it forces itſelf a paſſage, which ſometimes cloſes again by the tremulous motion it occaſions, and at others continues open; as may be ſeen in different parts of all theſe countries. When on account of the reſiſtance being equal, it finds a paſſage in ſeveral parts, the chaſms or fiſſures are generally ſmaller, ſo that rarely any veſtiges remain after the concuſſion. At other times when the ſubterranean cavities are ſo large as to form ſubterranean caverns, they not only rend the earth, and at every ſhock leave it full of diſruptions; but alſo cauſe it to ſink into ſpacious hollows; as I particularly obſerved near the town of Guaranda, a place in the juriſdiction of Chimbo, in the province of Quito; where in the year 1744 all the ground on one ſide of the chaſm ſunk near a yard, the other ſide riſing in the ſame proportion, though with ſome inequalities on both ſides.

The loud ſubterraneous noiſes preceding earthquakes, and which imitate thunder at a diſtance, ſeem to correſpond with the abovementioned cauſe and formation of earthquakes, as they can only proceed from the rarefaction of the air, on the ignition of the exploſive ſubſtances, which being impetuouſly propagated thro' all the caverns of the earth; propelling, and at the ſame time dilating what is contained in them, till all the cavities being pervaded, and no vent found, the efforts for a further dilatation, begin, and form the concuſſion with which it terminates.

It muſt be obſerved that at the time when the air, which had been confined within the earth, burſts through it, neither the light nor fire emitted from the chaſms are ſeen. The reaſon is, that this light and fire exiſt only at the inſtant when the matter becomes inflamed, and the air ſpreading itſelf through all the veins, the light is extinguiſhed by its dilatation, and becomes afterwards imperceptible. It is neceſſary to ſuppoſe that there muſt be ſome, tho' a ſhort interval, between the inflammation and effect. Neither is the flame permanent, the ſubſtances ignited not containing thoſe ſolid and oleaginous particles which ſupply the volcanoes. Beſides they are not in ſufficient quantity to aſcend from the ſubterraneous caverns where they took fire to the ſuperficies of the earth. Farther, this not being the place where the matter was originally contained, but that where it has forced a paſſage for the quantity of air which its rarefaction augmented, the firſt light is loſt among the meanders of its courſe, and therefore not to be ſeen when the wind violently forces a paſſage. There have, however, been inſtances when the light has been ſeen, though much oftener the ſmoke; but this is generally loſt in the clouds of duſt aſcending at the time of the concuſſion.

THE ſhocks are repeated at intervals, of a few days, ſometimes of a few hours; proceeding from the matter being diſperſed in different places, and each in a different degree of aptitude for inflammation, one part kindling after another ſucceſſively, as each is more or leſs prepared. Hence proceed alſo the different violence of the ſhocks and the different intervals of time. For the quantity firſt inflamed increaſes, by its heat, other inflammable portions of matter; whence a part which would not have been ignited till after ſome days, by means of this adventitious fire, becomes ſo within a few hours. The ſecond ſhocks are more violent, and cauſe a greater deſtruction than the firſt; for the fire of the portion of matter which is firſt inflamed, though in itſelf ſmall, is ſufficient to accelerate the fermentation of a much larger quantity, and conſequently muſt be attended with more powerful effects.

Though the ſummer here, as we have already obſerved, is conſiderably warm, yet is it not productive of venomous creatures, which in this country are not known; and the ſame may be ſaid of all Valles, though there are ſome parts, as Tumbez and Piura, where the heat is nearly equal to that at Guayaquil. This ſingularity can therefore proceed from no other cauſe than the natural drought of the climate.

The diſtempers moſt common at Lima are malignant, intermittent and catarrhous fevers, pleuriſies, and conſtipations; and theſe rage continually in the city. The ſmall-pox is alſo known here as at Quito, but is not annual; though when it prevails, great numbers are ſwept away by it.

Convulsions are likewiſe very common and no leſs fatal. This diſorder though unknown at Quito, is frequent all over Valles, but more dangerous in ſome parts than in others. Something has already been ſaid of this diſtemper in our account of Carthagena, but a more circumſtantial deſcription of it was reſerved for this place.

This diſtemper is divided into two kinds, the common or partial, and the malignant or arched convulſions. They both come on when nature is ſtruggling in the criſis of ſome acute diſtemper; but with this important difference, that thoſe attacked with the former, often recover, though the greater part die on the third or fourth day, the term of its duration; while thoſe who have the misfortune of being attacked by the latter, ſink under it in two or three days, it being very extraordinary to recover, and is therefore termed malignant.

The ſpaſms or convulſions conſiſt in a total inactivity of the muſcles, and a conſtriction of the nerves of the whole body, beginning with thoſe of the head; and theſe nerves being the channels which convey nouriſhment to the body, and this nouriſhment being precluded by the conſtriction of its conduits, they all ſucceſſively ſuffer; the muſcles, by having loſt their activity, cannot aſſiſt in the motion of the nerves, and theſe being conſtringed, can no longer perform their office. Add to this, a pungent humour diſperſing itſelf through all the membranes of the body, and cauſing inſupportable pains; ſo that the groaning patient labours under inconceivable tortures, which are ſtill increaſed on his being moved, though with the greateſt care and gentleneſs, from one ſide to the other. The throat is ſo contracted that nothing can be conveyed into the ſtomach. The jaws are alſo ſometimes ſo cloſely locked, as impoſſible to be opened. Thus the miſerable patient lies without motion, and tortured in every part of his body, till nature quite exhauſted falls a victim to this deleterious diſtemper.

In the partial kind, the pulſe is no more affected than in the diſtemper which preceded it, and commonly abates the violence of a fever. But in the malignant kind it augments, the circulations being quickened; and whether it be the effect of the humour impetuouſly circulating through every part, or of the pain proceeding from the laceration of the membranes, and abrading the muſcles, the patient falls into a lethargy, but which does not remove the torturing ſenſation of theſe punctures, often ſo inſupportable, that the miſerable patient violently turns himſelf, and thus augments his agonies, as evidently appears from his piercing cries and groans.

The malignant or arched ſpaſm, even in the firſt ſtage is ſo violent, as to cauſe a contraction of the nerves of the vertebræ from the brain downwards; and as the diſtemper increaſes, and the malignant humour acquires great activity, the nerves become more and more conſtricted, that the body of the patient, contrary to nature, inclines backward into an arch, and all the bones become diſlocated. However terrible the pains reſulting from hence may ſeem, they are ſtill increaſed by thoſe of the other ſpecies of convulſions, when the violence is ſuch that the patient uſually loſes all ſenſation, and falls into a total inaction, not having breath to utter his complaints.

It is common at the beginning of this diſtemper to be totally convulſed, ſo that every part of the patient is affected, and, during the continuance, is, as it were, deprived of all ſenſation. Their return is more frequent and laſting as the diſtemper increaſes, till nature becomes entirely ſpent; when the lethargic fits ſucceed, and it is generally in one of theſe that the patient breathes his laſt.

The uſual method of treating this diſtemper is by keeping both the bed, and the chamber very cloſe, even with a fire in it, that the pores being opened by the heat, the tranſpiration may be more copious. Laxative clyſters are often injected to mollify the contractions of the inteſtines, and other internal parts. External applications are alſo applied to ſoften the parts, and open the ducts by which nature may evacuate the morbid humour. For the ſame intention and to check its progreſs, cordials and diuretic draughts are preſcribed; and alſo the bath; but the latter only at the beginning of the firſt ſtage of the diſtemper; for if it is found to increaſe on the ſecond day, bathing is no longer ordered.

The women of Lima are ſubject to a diſtemper, extreamly painful, very contagious, and almoſt incurable: namely, a cancer in the matrix, which even at the beginning is attended with ſuch excruciating pains, that their lives are one continued ſeries of groans and complaints. During its progreſs, they diſcharge great quantities of morbid humours, become

come attenuated, fall into a ſtate of languor, which gradually puts a period to their lives. It uſually continues ſome years, with intervals of eaſe, during which, if the evacuations do not entirely ceaſe, they are conſiderably intermitted; the pains ſeem over, and they are capable of dreſſing themſelves and walking abroad; but the diſeaſe ſuddenly returns with double violence, and the patient becomes totally diſabled. This diſtemper comes on ſo imperceptibly, as not to be indicated either by the countenance or pulſe, till at its height; and ſuch is the contagion of it, that it is contracted only by ſitting in the ſame chair commonly uſed by an infected perſon, or wearing her cloaths; but it has not been known to affect the men, huſbands uſually living with their wives till the laſt ſtage of the diſtemper. Two cauſes are aſſigned for this malady, their exceſſive uſe of perfumes, which they always carry about them, and may doubtleſs contribute greatly to promote it; the other a continual riding in their calaſhes, but this does not ſeem to be of ſo much conſequence as the former. For then the moſt diſtinguiſhed of the fair ſex in other countries, who ride in coaches, and even uſe the more violent exerciſe of the horſe, would not be exempt from it.

SLOW or hectic fevers alſo prevail greatly in theſe countries, and are likewiſe contagious, but more from a want of a proper care in the furniture and apparel of the perſons infected, than any malignancy of the climate.

THE venereal diſeaſe is equally common in this country as in thoſe we have already mentioned; it is indeed general in all that part of America; and as little attention is given to it till arrived to a great height, the general cuſtom in all thoſe parts, a repetition here would be needleſs.

CHAP. VIII.

Fertility of the Territories of LIMA, *and the manner of cultivating the ſoil.*

IT is natural to think that a country, where rain is ſeldom or ever known, muſt, of neceſſity, be totally barren; whereas the country of Lima enjoys a fertility to be envied, producing all kinds of grain, and a prodigious wariety of fruits. Here induſtry and art ſupply that moiſture which the clouds ſeem to withhold; and the ſoil is by this means rendered remarkably fruitful, amidſt a continual drought.

It has already been obſerved, that one of the principal cares of the Yncas was the cutting and diſpoſing in the moſt advantageous manner, trenches or ſmall canals, in order to conduct the waters of the rivers to nouriſh every part, and render large fields capable of producing grain. The Spaniards finding theſe uſeful works ready executed to their hands, took care to keep them in the ſame order; and by theſe are watered the ſpacious fields of wheat and barley, large meadows, plantations of ſugar canes, and olive trees, vineyards and gardens of all kinds; all yielding uncommon plenty. Lima differs from Quito, where the fruits of the earth have no determined ſeaſons; but here the harveſts are gathered in, and the trees drop their leaves, according to their reſpective natures; for thoſe which grow ſpontaneouſly in a hot climate, though the livelineſs of their verdure fades, their leaves do not fall off till others ſupply their place. The bloſſoms alſo have their reſpective times, and are correſpondently ſucceeded by fruits; ſo that this country reſembles thoſe of the temperate zones, no leſs in the product and ſeaſons of corn, bloſſoms, fruits and flowers, than in the difference of winter and ſummer.

BEFORE the earthquake in 1687, when this city ſuffered in ſo deplorable a manner, the harveſts of wheat and barley were ſufficient to ſupply the wants of the country without any importation, eſpecially of wheat; but by this convulſion of nature, the ſoil was ſo vitiated, that the wheat rotted ſoon after it was ſown, occaſioned, probably, by the vaſt clouds of ſulphureous particles then exhaled, and the prodigious quantities of nitrous effluvia diffuſed through it. This obliged the owners of the lands to apply them to other uſes, and accordingly many of them were turned into meadows of clover, plantations of ſugar-canes, and other vegetables, which they found not ſubject to the ſame misfortune. After the land had continued forty years in this ſtate of ſterility, the huſbandmen began to perceive ſuch an alteration in the ſoil, as promiſed a ſpeedy return to its former goodneſs. Accordingly ſome trials were ſucceſsfully made with wheat, and by degrees that grain was found to thrive as before that dreadful event. But whether it be from the other plants, which have been cultivated in thoſe parts, or from any miſtruſt of the huſbandmen, the ſame quantity has not been ſown as before. It is natural to think that the late dreadful earthquake muſt have had the ſame pernicious effects on the ſoil. Though by means of the eſtabliſhment of the corn trade with Chili ſince that time, the conſequences will not be ſo ſenſibly felt. The fields in the neighbourhood of Lima are chiefly ſown with clover, of which there is here a conſumption not to be paralleled in any other place; it being the common fodder for all beaſts, particularly the mules and horſes, of which there is here an inconceivable number.

THE other parts of the country are taken up with plantations already mentioned, among which thoſe of canes are not the leaſt, and yield an excellent kind of ſugar. All theſe fields and plantations are cultivated by negro ſlaves, purchaſed for this ſervice; and the ſame is ſeen in the other improved parts of Valles.

The olive plantations appear like thick foreſts; for beſides the height, magnitude, and fulneſs of leaves of theſe trees, in all which they exceed thoſe of Spain, they are never pruned, by which means their branches became ſo interwoven, that the light cannot penetrate through their foliage. The plough is not uſed here, the only cultivation they require, being to clear the holes made at the foot of each for receiving the water, to keep the trenches open which convey it, and every three or four years to cut down all ſhoots or cions, in order to form paſſages for gathering the fruit. With this ſmall trouble the inhabitants have an uncommon plenty of the fineſt olives, which they either commit to the preſs for oil, or pickle, they being particularly adapted to the latter, both with regard to their beauty, largeneſs, and flavour. Their oil is much preferable to that of Spain.

The country contiguous to the city is covered with gardens, producing all the herbs and fruits known in Spain, and of the ſame goodneſs and beauty, beſides thoſe common to America; all which flouriſh here in a very uncommon degree; ſo that none of the parts of Peru, at leaſt ſuch as we viſited, are to be compared with thoſe of the neighbourhood of Lima, where every place is covered with fruits and eſculent vegetables.

It alſo enjoys another ſingular advantage, the whole year being as it were ſummer with regard to the plenty and freſhneſs of fruits; for the ſeaſons of the year varying alternately in Valles and the mountains, when the time of fruits is over in Valles, it begins on the ſkirts of the mountains; and the diſtance from Lima being not above twenty-five or thirty leagues, they are brought thither, and by this means the city is conſtantly ſupplied with fruits, except a few, as grapes, melons and water-melons, which requiring a hot climate, do not come to perfection in the mountains.

The grapes are of various kinds; and among them, one called the Italian, very large and delicious. The vines extend themſelves on the ſurface of the ground, which is very well adapted to ſupport them, being either ſtony or full of ſand. Theſe vines are pruned and watered at proper times, and thrive remarkably without any other care.

No other culture is beſtowed on thoſe deſigned for wine, for both at Ica, Piſco, Naſca, and all other parts where they grow, they are formed into eſpaliers. None of the grapes near Lima are uſed in making wine, the demand for them in other reſpects being too large.

The ſoil is ſtony and ſandy, that is, conſiſting of ſmooth flints or pebbles, which are ſo numerous that as other ſoils are entirely ſand, rock, or earth, this is wholly of the above ſtones; and in ſome parts prove very inconvenient to travellers, whether in a carriage or on horſeback. The arable lands have a ſtratum of about a foot or two of earth, but below that the whole conſiſts entirely of ſtones. From this circumſtance, the ſimilarity of all the neighbouring coaſts, and the bottom of the ſea, this whole ſpace may be concluded to have been formerly covered by the ocean, to the diſtance of 3 or 4 leagnes, or even farther, beyond its preſent limits. This is particularly obſervable in a bay about five leagues north of Callao, called Marques, where in all appearance, not many years ſince, the ſea covered above half a league of what is now Terra Firma, and the extent of a league and a half along the coaſt.

The rocks in the moſt inland part of this bay are perforated and ſmoothed like thoſe waſhed by the waves; a ſufficient proof that the ſea formed theſe large cavities, and undermined ſuch prodigious maſſes as lie on the ground, by its continual eliſions; and it ſeems natural to think that the like muſt have happened in the country contiguous to Lima, and that the parts, conſiſting of pebbles like thoſe at the bottom of the adjacent ſea, were formerly covered by the water.

Another ſingularity in this arid country is, the abundance of ſprings, water being found every where with little labour, by digging only four or five feet below the ſurface. This may ariſe from two cauſes; the one, that the earth, being, from its compoſition very ſpungy, the water of the ſea eaſily inſinuates itſelf to a great diſtance, and is filtrated in paſſing through its pores. The other, that the many torrents after deſcending from the mountains, ſoon loſe themſelves in theſe plains, but continue their courſe along the ſubterranean veins of the earth; for this ſtony quality of the ſoil from the nature of the ſprings cannot extend to any great depth, and underneath it the ſtratum is hard and compact; conſequently the water muſt be conveyed to the moſt porous parts, which being the ſtony, it there precipitates into a ſubterranean courſe, leaving the ſurface dry. We have already obſerved * that from many of the rivers in Valles, though apparently dry, the inhabitants procure a ſufficient quantity of water by digging wells in the beds over which their waters run in the winter: others might be paſſed without being known, but the bottom conſiſting entirely of pebbles, wherever the beaſts ſet their feet, the water immediately oozes out. The reaſon of this is, that the water at that time runs a little below the ſurface, and I do not doubt but the ſame will be found in

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* Chap. I. of this Vol.

in all Valles, though at different depths in different places.

This plenty of ſubterraneous ſtreams is doubtleſs of great advantage to the fertility of the country, particularly with regard to the larger plants, whoſe roots ſtrike deepeſt; and this ſeems a bountiful indulgence of the wiſe author of nature, who to provide againſt the ſterility which would certainly affect theſe countries from a want of water, has ſent a ſupply from the mountains, either in open rivers or ſubterraneous canals.

The lands in the juriſdiction of Chancay, like the other parts of the coaſts of Peru, are manured with the dung of certain ſea birds, which abound here in a very extraordinary manner. Theſe they call Guanoes, and the dung Guano, the Indian name for excrement in general. Theſe birds, after ſpending the whole day in catching their food in the ſea, repair at night to reſt on the iſlands near the coaſt, and their number being ſo great as entirely to cover the ground, they leave a proportionable quantity of excrement or dung. This is dried by the heat of the ſun into a cruſt, and is daily encreaſing, ſo that notwithſtanding great quantities are taken away, it is never exhauſted. Some will have this Guano to be only earth endowed with the quality of raiſing a ferment in the ſoil with which it is mixed. This opinion is founded on the prodigious quantities carried off from thoſe iſlands, and on the experiment made by digging or boring, by which the appearance at a certain depth, was the ſame as at the ſuperficies; whence it is concluded, that the earth is naturally endowed with the heating quality of dung or Guano. This would ſeem leſs improbable, did not both its appearance and ſmell prove it to be the excrement in queſtion. I was in theſe iſlands when ſeveral barks came to load with it; when the inſupportable ſmell left me no room to doubt of the

nature

nature of their cargo. I do not however pretend to deny, but that it may be mixed with earth, or that the moſt ſuperficial part of the earth does not contract the like virtue, ſo as to produce the ſame effect. But however it be, this is the manure uſed in the fields ſowed with maize, and with proper waterings is found greatly to fertilize the ſoil, a little of it being put cloſe to every ſtem, and immediately watered. It is alſo of uſe in fields of other grain, except wheat and barley, and, conſequently, prodigious quantities of it yearly uſed in agriculture.

Besides the orchards, fields, and gardens, with which this country is ſo delightfully variegated, there are other parts where nature itſelf ſpontaneouſly furniſhes beautiful proſpects for the inhabitants, and plenty of excellent food for their cattle; particularly the hills of St. Chriſtopher and Amancaes, whoſe perpetual verdure diverſified in ſpring with elegant flowers, ſeems to invite the neighbouring inhabitants to a nearer enjoyment of the beauties it preſents at a diſtance to their view. The parts in the neighbourhood of the city to the diſtance of ſix or eight leagues, offer the like entertainment; and accordingly many families reſort thither for the change of air, and the tranquility of rural amuſements, The hills called Amancaes, already mentioned, have their name ftom a certain flower growing on them. It is yellow, and of the campanula form, with four pointed leaves. Its colour is remarkably brilliant, and in that wholly conſiſts its value, being totally void of fragrancy.

Besides theſe delightful retreats, the city has a public walk in the ſuburb of St. Lazaro, called Alameda, conſiſting of rows of orange and lemon trees; along the banks of the river is another called the Acho, to which there is a daily reſort of coaches and calaſhes.

THE only monuments of antiquity remaining in the neighbourhood of Lima are the Guacas, or ſepulchres of the Indians, and ſome walls, which were built on both ſides of the roads, and are frequently ſeen all over this country. But three leagues north eaſt of the city, is a valley called Guachipa, are ſtill ſtanding the walls of a large town. Through ignorance I did not viſit them whilſt I was at Lima; the account of them, however, which the ingenious marquis de Valde Lyrios was pleaſed to give me, may be equally relied on, as if related from my own knowledge; eſpecially as he took a very accurate ſurvey of the whole. He obſerved, that the ſtreets were very narrow, that the walls of the houſes, which in common with all the buildings of that time were without roofs, were only of mud, and that each houſe conſiſted of three ſmall ſquare apartments. The doors towards the ſtreet, were not ſo high as the general ſtature of a man, but the walls wanted little of three yards. Among all the houſes which compoſed this large town, ſituated at the foot of a mountain, is one, whoſe walls overlook all the others, and thence it is concluded to have belonged to the Caſique or prince; though its ruinous condition render it impoſſible to determine abſolutely. The inhabitants of this valley, where the fruitful fields are watered from the river Rimac, at no great diſtance from theſe ruins, call them old Caxamarca, though it cannot now be diſcovered whether that was the real name of the town in the times of Paganiſm. For there neither remains any memorial of ſuch tradition, nor any mention of it in the hiſtories of that kingdom, written by Garcilazo, and Herrera; ſo that all we know is, that the epithet old is now applied to it by way of diſtinction from the preſent town of Caxamarca.

ONE aſtoniſhing particular in the walls of this town, and in all others in the neighbouring valleys is, that though built on the ſurface of the earth, without any foundation, they have withſtood thoſe violent earthquakes which overthrew the more ſolid buildings of Lima and other large towns erected in the Spaniſh manner; having received no other damage than what naturally reſults from being forſaken, or what the drivers have done, who make it a reſting place for their cattle in the road to Lima.

From the conſtruction of theſe houſes it may be inferred, that long experience has inſtructed the natives, that in parts ſo ſubject to earthquakes, it was improper to lay a foundation in order to ſtrengthen the walls; and tradition informs us, that when the newly conquered Indians ſaw the Spaniards dig foundations for lofty buildings, they laughed at them, telling them they were digging their own ſepulchres; intimating, that the earthquakes would bury them under the ruins of their houſes. It is indeed a melancholy proof of pride and obſtinacy, that after having the prudent example of the Indians before their eyes, the total ruin of the city at four different times in leſs than the ſpace of two hundred years, has not been able entirely to eradicate the deſtructive paſſion for airy and elegant buildings, though theſe neceſſarily require large and lofty walls, which muſt have a foundation proportional to the magnitude of the ſtructure, and the weight they are to ſupport.

CHAP. IX.

Of the Plenty and different Kinds of Proviſions at LIMA.

THE fertility of the ſoil, the goodneſs of the climate, and the convenient ſituation of Lima, concur to maintain in it a conſtant plenty. The fruits and herbs have been already mentioned; it remains that we conſider the meat and fiſh with which it is alſo equally provided.

The bread at Lima is inconteſtibly the beſt in all this part of America, both with regard to its colour and taſte, the goodneſs of the corn being improved by the manner of working it; and at the ſame time ſo reaſonable, that the inhabitants uſe no other. It is of three kinds, one called Criollo, the crumb of which is very light and ſpongy; the ſecond French bread; and the laſt ſoft bread. It is kneaded by negroes employed by the bakers, many of whom are very rich, and their ſhops always well provided. Beſides their own ſlaves, the bakers are alſo obliged to receive any delivered up to them by their maſters to work as a puniſhment, and for theſe, beſides finding the ſlaves in proviſions, they pay the maſter the uſual wages in money or in bread. This puniſhment is the ſevereſt that can be inflicted on them, and, indeed, all the hardſhips and cruelties of the galleys are leſs than what theſe wretches are obliged to undergo. They are forced to work the whole day and part of the night, with little food and leſs ſleep; ſo that in a few days the moſt vigorous and ſtubborn ſlave becomes weak and ſubmiſſive, and proſtrates himſelf before his maſter, with tears, intreaties and promiſes of amendment on being removed from that place, the dread of which is doubtleſs of the greateſt uſe in awing the vaſt number of ſlaves, both within and without the city.

Their mutton is the moſt common food, and is very palatable, from the nitrous paſtures where the ſheep are fattened. The beef alſo is good; but little eaten except by the Europeans, ſo that two or three beaſts ſupply the city for a week. Here is alſo plenty of poultry, partridges, turtle-doves, &c. Pork is alſo in great abundance, though not equally delicate with that of Carthagena. The lard is uſed in dreſſing all kinds of diſhes whether of fleſh or fiſh, oil being only uſed in ſallads and the like. This method of cookery is ſaid to have had its riſe when the country afforded no oil, and has been continued to the preſent time, notwithſtanding it is now produced in great quantities. Antonia de Rivero, an inhabitant of Lima in the year 1660, planted the firſt olive-tree ever ſeen in Peru.

From the mountains, are often ſent by way of preſent, frozen calves; being killed there, and left two or three days on the heaths to freeze; after which they are carried to Lima, where they may be kept any time required, without the leaſt tendency to putrefaction.

Of fiſh there is ſtill a greater variety daily brought from the neighbouring parts of Chorillos, Callao, and Ancon, the Indian inhabitants of which make fiſhing their whole buſineſs. The moſt palatable are the Corbinas, and the Pege Reyes, or king's fiſh; but thoſe in the greateſt plenty, and at the ſame time very palatable, are the anchovies. The Corbinas, and the king's fiſh, infinitely excel thoſe of Spain; the latter is alſo remarkable for its ſize, being generally ſix or ſeven Paris inches in length; yet even theſe are thought to be ſurpaſſed by thoſe caught in Buenos Ayres river. It is a ſalt water fiſh, but very little different from that caught in the rivers of Spain. The river of Lima affords a ſort of prawns, two or three inches in length, but thoſe ſhould rather be called Cray-fiſh.

The whole coaſts abound with ſuch ſhoals of anchovies, as exceed all compariſon; and beſides the vaſt quantities caught by fiſhermen, they are the chief food of innumerable flights of birds, with which all thoſe iſlands abound, and commonly called Guanoes, poſſibly from the Guano or dung mentioned in the preceding chapter; many of them are indeed alcatraces, a kind of gull, though all comprehended under the generical name of Guanoes. A little after the appearance of the ſun, they riſe from thoſe iſlands in ſuch large and thick flights as totally to cover them, and fly towards the ſea for an hour or two, without any viſible decreaſe of their number. When at ſome diſtance from the land they divide themſelves, and begin their fiſhing in a very entertaining manner. They fly in a circle at a conſiderable height above the water, and on ſeeing a fiſh, they dart down with their beak foremoſt and their wings cloſed, with ſuch force that the agitation of the water is ſeen at a diſtance; after which they riſe again into the air and devour the fiſh. Sometimes they remain a conſiderable time under water, and riſe at ſome diſtance from the place where they fell, doubtleſs becauſe the fiſh has endeavoured to eſcape, thus diſputing celerity with them in their own element. They are continually ſeen in the place they frequent, ſome watching in gyrations, ſome darting down, others riſing with their prey; while their great numbers render this confuſion diverting to the ſpectator. When they are either tired or ſatisfied they alight upon the waves, and at ſun ſet, forming themſelves into one body, withdraw to the iſlands where they paſs the night.

At the port of Callao it is obſerved, that all the birds which reſt on thoſe iſlands to the N. of it, in the morning univerſally fly towards the S. in queſt of prey, returning in the evening to their place of reſt; when the middle of the flight is over the harbour neither the beginning nor end can be ſeen, and the whole flock take up two or three hours in paſſing over.

Though ſhell fiſh are very ſcarce along this coaſt, ſome are found near Callao; particularly a kind, the ſhell of which reſembles that of a muſcle, though much larger. The fiſh itſelf has more the appearance of an oyſter, and much the ſame taſte.

The wines at Lima are of different ſorts, white, red, and dark red: and of each ſort ſome are very generous and delicious. They are imported from the coaſts of Naſca, Piſco, Lucumba, and Chili; but the latter produces the beſt, and among them ſome Muſcadel. The wine of Naſca is white, and has the leaſt demand of any, being inferior to the others both in quality and taſte. That from Piſco has the greateſt ſale, and from the ſame place come all the brandies either uſed at Lima or exported; no rum being either made or uſed here.

Most of the dried fruits are brought from Chili; and by means of the trade carried on between the two kingdoms, Lima is ſupplied with all ſorts of fruits known in Spain, as almonds, walnuts, filberts, pears, apples, &c. ſo that their tables cannot in this reſpect fail of plenty and elegance, having at one time the fruits of the different ſeaſons, both of America and Europe. But amidſt this plenty, every thing is very dear, the price being four or five times as much as at Quito, bread only excepted. Wine, oil and dried fruits, are ſome of the cheapeſt. The poorer claſs, however, as the negroes and other caſts, live tolerably well, fiſh, which is little eſteemed by the opulent, ſelling at a low price; the ſame may be ſaid of mutton and beef, with regard to the inhabitants of this country in general. *

Sweetmeats are alſo here in the ſame plenty as in the other parts of South-America, though ſeldom eaten, except as deſerts, and even then very moderately. Inſtead of chocolate, Mate, or Paraguay tea is generally uſed, and prepared twice a day. Though this has here the defect already obſerved, it is better prepared than in any other part.

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* A quarter of their beſt beef may be bought for eight rials (3s. 7d. ſterling) the hide of beaſt being, commonly, of more value than the carcaſe. A.

CHAP.

CHAP. X.

Trade and Commerce of LIMA.

THE city of Lima could not have attained to ſuch ſplendor, if, beſides being the capital of Peru, it had not been alſo the general ſtaple of the kingdom. But as it is the reſidence of the government and chief tribunals, ſo it is alſo the common factory for commerce of every kind, and the center of the products and manufactures of the other provinces, together with thoſe of Europe, brought over in the galleons or regiſter ſhips; and from hence they are diſtributed through the vaſt extent of theſe kingdoms, whoſe wants are ſupplied from Lima, as their common mother. At the head of this commerce is the tribunal del Conſulado, which appoints commiſſaries to reſide in the other cities of its dependencies, extending through all Peru.

All the wealth of the ſouthern provinces, is brought to Lima, where it is embarqued on board the fleet, which, at the time of the galleons ſails from Callao, to Panama. The proprietors of the treaſure, commit it to the merchants of Lima, who traffic at the fair with this and their own ſtock. The ſame fleet returns to the harbour of Paita, where the European merchandizes of value purchaſed at Porto Bello fair are landed, in order to avoid the delay of ſailing to Callao, and ſent by land to Lima, on droves of mules; but thoſe of leſs value are carried thither by the ſame ſhips.

On the arrival of theſe commodities at Lima, the merchants remit to their correſpondents ſuch parts as they had a commiſſion to purchaſe, reſerving the reſt in ware-houſes to diſpoſe of on their own account to traders, who at this time reſort to Lima, or ſend them to their factors in the inland provinces, who remit the returns in money or bills of exchange to their principals at Lima. Theſe conſignments are repeated till they have diſpoſed of their whole ſtock. Thus the cargo of a flotilla laſts a conſiderable time, there being no immediate vent for the whole.

The produce of the ſales in the inland parts of the kingdom, is ſent to Lima in bars of ſilver, and Pignas †, and is coined at the mint in this city. Thus the traders have not only a great profit in the ſale of their goods, but alſo in the returns of their ſilver, which they take at a lower rate than is allowed them for it. All theſe ſales may therefore be conſidered as an exchange of one commodity for another; for he who ſells the goods agrees both with regard to their price, and the rate in which he is to take the ſilver bars, or pignas; and thus two ſpecies of trade are tranſacted at the ſame time, one a ſale of goods, and the other of ſilver.

The remittances ſent to Lima during the interval between the Flotillas, are laid out in manufactures of the country, great quantities of which come from the province of Quito; and this trade is carried on in all reſpects like the former; for the conſumption of them being equal or rather larger; they are not leſs neceſſary here than in Europe, being worn by all the lower claſs of people, who cannot afford the price of European ſtuffs; and the generality of traders who come to Lima purchaſe ſtuffs of both kinds, that they may be provided with aſſortments for cuſtomers of all ranks.

Besides this commerce, which is the moſt conſiderable, and tranſacted wholly by means of this city, Lima has alſo its particular trade with the kingdoms both of north and ſouth America. The moſt conſiderable commodity received from the former is ſnuff, which is brought from the Havannah to Mexico, and after being there improved is forwarded to Lima, and from thence ſent into the other provinces. This trade is carried on nearly in the ſame manner as that of Panama; but thoſe who deal in this commodity, never trouble themſelves with any other except perfumes, as ambergriſe, muſk, &c. and porcelain ware. Some of theſe traders are ſettled at Lima, others reſide there occaſionally, but are in general factors to the merchants at Mexico. Lima alſo receives from the ports of new Spain, Naphtha, tar, iron, and ſome indigo for dying.

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† Pignas are porous and light maſſes of ſilver, being an amalgama of mercury and duſt taken out of the mines.

The kingdom of Terra Firma ſends to Lima leaf-tobacco, and pearls, which here meet with a good market; for beſides the great numbers worn by the ladies, no mulatto woman is without ſome ornament or other made of them. During a free aſſiento of negroes, this commerce is always carried by way of Panama, and to a conſiderable amount.

The ladies, and indeed women of all ranks, have a very ancient cuſtom, namely, the carrying in their mouths a Limpion, or cleanſer, of tabacco. The firſt intention of this was to keep the teeth clean, as the name itſelf intimates. Theſe Limpions are ſmall rolls of tobacco, four inches in length, and nine lines in diameter, and tied with a thread, which they untwiſt as the Limpion waſtes. One end of this they put into their mouth, and after chewing it for ſome time, rub the teeth with it, and thus keep them always clean and white. The lower claſs of people, who generally pervert the beſt things, carry this cuſtom to ſuch exceſs, as to keep continually in their mouths a roll of tobacco, an inch and a half in diameter; affecting to diſtinguiſh themſelves by the largeneſs of their Limpions, tho' it abſolutely disfigures them. This cuſtom, together with that of ſmoaking, which is equally common among the men, occaſions a great demand for leaf tobacco. The Limpions are made of Guayaquil tobacco mixed with ſome of that brought from the Havannah to Panama; but that uſed in ſmoaking comes from Santa Mayobamba, Jaen de Bracamaros, Llulla, and Chillaos, where it grows in the greateſt plenty, and is beſt adapted to that purpoſe.

All the timber uſed in building houſes, refitting ſhips, or building ſmall barks at Callao, is brought from Guayaquil, together with the Cacao; but the conſumption of the latter is here very ſmall, the Paraguay tea being more generally uſed. The timber trade is carried on by the maſters of ſhips, who bring it hither on their own account, as we have already obſerved, in deſcribing Guayaquil, and depoſiting it in ſtore-houſes at Callao, ſell it as opportunity offers.

The coaſts of Naſca and Piſco, ſend to Lima, wine, brandy, raiſins, olives and oil: and the kingdom of Chili, wheat, flour, lard, leather, cordage, wines, dried fruits, and ſome gold. Beſides theſe all ſorts of goods are alſo laid up at Callao, in ſtore-houſes built for that purpoſe; ſome on account of the owners who remit them, others for maſters of ſhips who purchaſe them on the ſpot where they grow, or are made. Every Monday during the whole year there is a fair at Callao, whither the proprietors and dealers reſort from all parts; and the goods are carried according to the buyers direction on droves of mules kept there for that purpoſe by the maſters of the warehouſes, and whoſe profit wholly conſiſts in the hire of theſe beaſts.

The proviſions brought to Lima are not only ſufficient to ſupply its numerous inhabitants, but great quantities of all kinds are ſent to Quito, and its juriſdiction, to Valles and Panama. Copper and tin in bars are brought from Coquimbo; from the mountains de Caxamarca, and Chacapoyas, canvas made of cotton for ſails and other ſtuffs of that kind, and alſo of Pita: Cordovan leather, and ſoap are made all over Valles*. From the ſouthern provinces, as Plata, Oruro, Potoſi, and Cuſco, is ſent Vicuna wool for making hats, and ſome ſtuffs of a peculiar fineneſs. Laſtly, from Paraguay the herd called by that name is ſent, of which there is an amazing conſumption, it being ſent from Lima among the other provinces, as far as Quito. There is no province in Peru, which does not remit to Lima, its products and manufactures; and ſupplies itſelf from hence with the neceſſary commodities. Thus Lima is the emporium to which people reſort from all parts; and trade being always in a conſtant circulation, beſides the continual reſort of ſtrangers, the families of rank are enabled to ſupport the expences of that ſplendor I have already mentioned; for without ſuch continual aſſiſtance they muſt either contract their expences, or fall victims to their oſtentation.

IT would naturally be imagined that by a commerce ſo extenſive and important, many vaſt fortunes muſt be acquired, eſpecially as every branch of it is attended with great profits; but if there are ſome who actually do acquire great riches, neither their number nor opulence are equal to what might be expected; for by a narrow inſpection there will hardly be found above ten or fifteen houſes of trade, excluſive of immoveables as lands and offices, whoſe ſtock in money and goods amounts to five or ſix hundred thouſand crowns; and to one that exceeds this ſum, there are more that fall ſhort of it. Many poſſeſs from one to three hundred thouſand crowns, and theſe are indeed the perſons who compoſe the main body of trade. Beſides theſe there are great numbers of inferior traders, whoſe capitals do not exceed fifty or a hundred thouſand crowns. The paucity of immenſe fortunes amidſt ſuch advantages is doubtleſs owing to the enormous expences; whence, though their gains are great, they can hardly ſupport their credit; ſo that after paying the fortunes of their daughters, and the eſtabliſhing their ſons, the wealth of moſt families terminates with the life of him who raiſed it, being divided into as many ſmall ſtocks as he had dependents; unleſs ſome either by induſtry or good fortune, improve the portion they obtained by inheritance.

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* Their cotton canvas is not above fou rinches wide, ſo that ſail-making in this part of America is very tedious; but their ſails made of this narrow canvas, are very ſtrong and laſting. A.

The inhabitants of Lima have a natural diſpoſition and aptitude for commerce, and the city may be conſidered as an academy to which great numbers repair to perfect themſelves in the various arts of trade. They both penetrate into the fineſſes of the ſeller; and artfully draw the purchaſer into their views. They are bleſſed with a remarkable talent of perſuaſion, at the ſame time that they are incapable of being perſuaded, as well as of artfully eluding objections. They affect to ſlight what they are moſt deſirous of purchaſing, and by that means often make very advantageous bargains, which none can obtain from them. But after all theſe precautions and fineſſes in buying and ſelling, for which they are ſo diſtinguiſhed, none are more puuctual and honourable in performing their contracts.

Besides the ſhops where ſtuffs and goods of that kind are ſold; there are others for ſnuff, and in theſe may be purchaſed the wrought plate, which is bought in the cities near the mines, where it is made.

The wholeſale traders, who have large warehouſes, are not above keeping ſhops where they ſell by retail, which is reckoned no diſgrace; and thus they gain that profit which they muſt otherwiſe allow to others.

And from this indulgence granted to every branch of commerce, it flouriſhes very greatly. There are, however, many families, who, as I have already obſerved, ſupport a proper ſplendor entirely by the revenue of their eſtates, without joining in the cares and hurry of commerce. But a greater number with eſtates, add the advantages of commerce, in order to preſerve them. Theſe, however, deal only at the fairs of the galleons, and in other large branches of commerce; and find the benefit of having abandoned thoſe ſcruples brought by their anceſtors from Spain, namely, that trade would tarniſh the luſtre of their nobility.

CHAP. XI.

Extent of the juriſdiction of the Vice-roy of PERU: *together with the audiences and dioceſſes of that kingdom.*

THE foregoing accounts naturally lead to the extent of the audience of Lima, and the juriſdiction of the vice-roy of Peru. But ſuch a particular deſcription as I have already given * of Quito, requiring a perſonal knowledge of all its provinces and juriſdictions, and alſo a particular work, from the extenſiveneſs of the ſubject, I ſhall confine myſelf to ſome principal accounts, but which will convey an adequate idea of the vaſt dominions of this country. In order to this I have conſulted ſeveral perſons, ſome of which have been veſted with high employments here, and others, whoſe commendable curioſity, as natives of this country, had prompted them to acquire an exact knowledge of it. This was a reſource of abſolute neceſſity; no opportunity having offered of viſiting the inland parts of theſe countries; and the accounts we received of them at Lima, were not to be depended upon, with that confidence neceſſary to their being inſerted here; for conſidering the vaſt diſtance between the capital and ſome provinces, it is no wonder they are but little known at Lima. The reader will therefore indulge me in giving a ſuperficial account of ſome; for according to the method in which I began to write the hiſtory, we ſhall inſert ſuch particulars only as are authentic; it being undoubtedly more advantageous to ſay a little with truth, than to engage in prolix and uncertain particulars.

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* Vol. I.

In order the better to deſcribe the countries governed by the vice-roy of Peru, without departing from the plan hitherto obſerved, I ſhall divide the whole juriſdiction of its government, into thoſe audiences of which it conſiſts; theſe into the dioceſſes they contain; and the dioceſſes into juriſdictions under a Corregidor.

The vice-royalty of Peru in South America, extends over thoſe vaſt countries, included in the juriſdictions of the audience of Lima, Los Charcas, and Chili; and in theſe are comprehended the governments of Santa Cruz de la Sierra; Paraguay, Tucuman, and Buenos Ayres. Though theſe three provinces and the kingdom of Chili have particular governors inveſted with all the authority agreeable to ſuch a character; and as ſuch are abſolute in political, civil, and military affairs, yet, in ſome caſes, are ſubordinate to the vice-roy; for inſtance, on the death of any inferior governor, the vacancy is ſupplied by him. Before the erection of the vice-royalty of the new kingdom of Granada in 1739, that of Peru, as we have already obſerved, extended to the countries of the two audiences of Terra Firma and Quito; but thoſe being then ſeparated from it, the bounds of it on the north were the juriſdiction of Piura, which extends to thoſe of Guayaquil and Loxa, and that of Chacapayas, which joins to the government of Jaen de Bracamoros. Thus the vice-royalty of Peru begins at the bay of Guayaquil, at the coaſt of Tumbez, in 3° 25′ ſouth latitude, and reaches to the land of Magellan in 50° conſequently it extends 1012 ſea leagues. Eaſtward it partly terminates on Brazil, being bounded by the celebrated line, or meridian of demarkation, or that which ſeparates the dominions of Spain and Portugal, and on the coaſt of the north ſea: and on the W. is terminated by the ſouth-ſea.

The audience of Lima erected in the year 1542, though it was the year 1544 before any ſeſſion was held in that city, contains within its juriſdiction one arch-biſhopricks, and four biſhopricks, viz.

The archbiſhoprick of Lima, and the biſhopricks of Truxillo, Guamanga, Cuſco, and Arequipa.

The archbiſhoprick of Lima, to which the precedence in every reſpect belongs, ſhall be the ſubject of this chapter. It contains fourteen juriſdictions, which I ſhall treat of in the order of their ſituation, beginning with thoſe neareſt the capital, and concluding with thoſe which are moſt remote: the ſame method ſhall alſo be obſerved in the other dioceſſes.

I. The Curcado or circuit of Lima.
II. Chancay.
III. Santa.
IV. Canta.
V. Canete.
VI. Ica, Piſco, and Naſca.
VII. Guarachia.
VIII. Guanuco.
IX. Yauyos.
X. Caxatambo.
XI. Sarma.
XII. Jouxa.
XIII. Conchucos.
XIV. Guyalas.
XV. Guamalies.

I. II. III. The juriſdiction of Lima, Chancay, and Santa have been already deſcribed in Chap. III.

IV. The juriſdiction of Canta begins at the diſtance of five leagues N. N. E. of Lima, where it terminates on the Circado of that city. It extends above thirty leagues, and the greater part of them taken up by the firſt branch of the Cordillera of the Andes; ſo that the temperature of the air is different in different parts of the country; that part which lies low, or among the valleys being hot, thoſe on the ſkirts of the mountains, which are alſo intermixed with ſome plains, temperate; and thoſe in the upper parts of the mountains cold. This difference of air is of great advantage both to the fruits of the earth and paſtures; for by appropriating every ſpecies to its proper degree of heat, the produce is large, and exceeding good. Among all the fruits the Papa is particularly diſtinguiſhed, and the roots carried to Lima where they meet with a good market. The vaſt fields of Bombon, part of which belongs to this juriſdiction, are by their high ſituation, always cold; yet they afford paſture for innumerable flocks of ſheep. Theſe extenſive tracts of land are divided into Haciendas, or eſtates belonging to noble families of Lima. At Guamantanga, one of the towns in this juriſdiction is a miraculous crucifix, devoutly worſhipped; the inhabitants of Lima, and the neighbouring country, go thither in pilgrimage at Whitſuntide to aſſiſt at a feſtival, inſtituted particularly in honour of it.

V. The town of Canete is the capital of the juriſdiction of its name. Its juriſdiction begins at the diſtance of ſix leagues ſouth from Lima, and extends along the coaſt in the ſame rhumb above thirty leagues. The temperature of the air in this juriſdiction is the ſame with that in the valleys of Lima; and the country being watered by a large river, and other leſſer ſtreams, produced vaſt quantities of wheat and maize. Great part of the lands are planted with canes, from whence they extract an excellent ſugar. Theſe profitable tracts of land belong alſo to noble families. In the neighbourhood of Chilca, ſituated about ten leagues from Lima, is found ſalt-petre of which gnnpowder is made at that city. Beſides theſe advantages it has a good fiſhery, which affords a comfortable ſubſiſtence to the Indian inhabitants of the towns, particularly thoſe ſituated near the ſea coaſt; together with plenty of fruits, pulſe, and poultry, the breeding of which is another occupation of the Indians. Whence a large trade is carried on between this juriſdiction and Lima.

VI. Ica, Piſco, and Naſca are three towns which denominate this juriſdiction; one part of it runs along the coaſt ſouthward, and its territories extend above 60 leagues; but are intermixed with ſome deſarts, and the country being ſandy, thoſe parts which are beyond the reach of the trenches cut from the rivers are generally barren. I ſay generally, becauſe there are ſome tracts, which, without the benefit of an artificial watering, are planted with vines, and produce excellent grapes, the roots being ſupplied with moiſture from the internal humidity of the earth. Great quantities of wines are made from them, and chiefly exported to Callao, and from thence to Guayaquil and Panama; alſo to Guamanga, and other inland provinces: they alſo extract from theſe wines great quantities of brandy. Some parts of this juriſdiction are planted with olive-trees, which produce excellent fruit either for eating, or oil. The fields, which are watered by the trenches, yield an uncommon plenty of wheat, maize, and fruits. The juriſdiction of Ica is remarkable for ſpacious woods of Algarrobales or carob-trees, with the fruit of which the inhabitants feed vaſt numbers of aſſes, for the uſes of agriculture. The Indians who live near the ſea apply themſelves to fiſhing, and after ſalting carry it to the towns among the mountains, where they never fail of a good market.

VII. The juriſdiction of Guarachiri contains the firſt chain and part of the ſecond of the mountains, extending itſelf along theſe chains above forty leagues. This province begins about ſix leagues eaſt of Lima. From the diſpoſition of its parts, thoſe places only which lie in the valley, and in the breaches of the mountains are inhabited; and theſe are very fertile, producing great quantities of fruit, wheat, barley, maize, and other grain. In its mountains are ſeveral ſilver mines, though but few of them are wrought, being none of the richeſt.

VIII. Guanuco is a city and the capital of its juriſdiction, which begins forty leagues north-eaſt of Lima. This city was formerly one of the principal in theſe kingdoms, and the ſettlement of ſome of the firſt conquerors; but at preſent in ſo ruinous a condition, that the principal houſes where theſe great men lived remain as it were only monuments of its former opulence. The other parts of it can hardly be compared to an Indian town. The temperature of the air in the greateſt part of its territories is very pure and mild; and the ſoil fruitful. Several kinds of ſweetmeats and jellies are made here, and ſold to other provinces.

IX. The juriſdiction of Yauyos, begins twenty leagues ſouth-eaſt from Lima, and takes up part of the firſt and ſecond chain of the Cordilleras; conſequently the temperature of the air is different in different parts. The greateſt length of this juriſdiction is about thirty leagues, and abounds in fruits, wheat, barley, maize, &c. whilſt other parts are continually cloathed with verdure, and feed numerous herds and flocks for the markets of Lima; and theſe are the moſt conſiderable articles of its commerce.

X. The juriſdiction of Caxatambo, which begins 35 leagues north of Lima, extends about 20 leagues, and partly among the mountains, whence the temperature of the air is various; but the whole territory is very fertile in grain. It has alſo ſome ſilver mines, which are worked, and the Indians have manufactures of bays, which make part of the trade of this juriſdiction.

XI. The juriſdiction of Tarma is one of the largeſt in this archbiſhoprick. It begins forty leagues north-eaſt from Lima, and terminates eaſtward on a tract of land inhabited by wild Indians, called Maran-cochas, who often make inroads into the territories of this juriſdiction. The difference of the air in its ſeveral parts, render it capable of producing all kind of grain and fruits, which the inhabitants are not wanting to improve. The temperate parts are ſown with wheat, barley, maize, and other grain; while the colder parts afford paſture to infinite numbers of cattle of all kinds. This province is alſo rich in ſilver mines; and as many of them are worked, they ſpread affluence all over the country. Beſides theſe important ſources of commerce, and that of the cattle, the making of bays and other coarſe ſtuffs, profitably employ great numbers of Indians in moſt of its towns.

XII. The juriſdiction of Jauxa borders on the ſouthern extremity of the former, and begins about forty leagues eaſt of Lima, and extends forty more along the ſpacious valleys and plains between the two Cordilleras of the Andes. In the middle of it runs a large river, called alſo Jauxa, the ſource of which is in the lake of Chincay-Cocha, in the province of Tarma. It is alſo one of the branches of the river of the Amazons. The whole juriſdiction of this province is divided into two parts by the river, and in both are ſeveral handſome towns, well inhabited by Spaniards, Meſtizos, and Indians. The ſoil produces plenty of wheat and other grain, together with a great variety of fruits. It has alſo a conſiderable ſhare of trade, being the great road to the provinces of Cuſco, Paz, Plata, and others to the ſouthward, here called Tiera, de Ariba, or the upper country. Like the former it borders eaſtward on the wild Indians of the mountains, but among which the order of St. Francis has eſtabliſhed ſeveral miſſions, the firſt being in the town of Ocopa. Within its dependances are ſeveral ſilver mines, ſome of which being worked, greatly increaſe the riches of this province.

XIII. The juriſdiction of Conchucos begins forty leagues N. N. E. of Lima, and extends along the center of the Cordillera; ſo that its air is different according to the height of the ſituation of its ſeveral parts, the mildeſt of which produce all kinds of grain and fruits, and the others, where the effects of the cold checks this fertility, afford paſture for cattle of all kinds. In this juriſdiction are great number of looms; the principal occupation of the Indians being ſeveral kinds of woollen manufactures, and theſe conſtitute the greateſt part of its commerce with other provinces.

XIV. The province of Guaylas, like the former, extends along the center of the Cordillera, beginning fifty leagues from Lima, and in the ſame direction as the other; this juriſdiction is large, and has different temperatures of air. The low parts produce grain and fruits, the upper abound in cattle and ſheep, which form the greateſt branch of their trade.

XV. The laſt is that of Guamalies, which, like the former, is ſituated in the center of the Cordillera, conſequently its air very different. This juriſdiction begins eighty leagues N. E. of Lima, and its ſituation being rather cold than temperate, few places are fertile in its whole extent, which is above forty leagues. The Indian inhabitants of the towns apply themſelves to weaving, and make a great variety of bays, ſerges, and other ſtuffs, with which they carry on a very conſiderable trade with the other provinces, deſtitute of ſuch manufactures.

The preceding provinces, together with the following in the audience of Lima, as in thoſe belonging to that of Charcas, are full of towns, villages and hamlets, inhabited by Spaniards, Meſtizos, and Indians; but with ſome difference, the number of Spaniards being greater in ſome, and in others that of the Indians. Many of them are indeed ſolely inhabited by the latter. The diſtance from the capital of the province, eſpecially to the towns ſituated on its frontiers, being ſo great, as to render it impoſſible for the corregidor to diſcharge his office every where with the neceſſary punctuality and attention, the province is divided into ſeveral diſtricts, conſiſting of three or four towns, more or leſs, according to their largeneſs and diſtance; and over theſe is placed a delegate.

Every ſettlement of any conſequence maintains a prieſt; and ſo commendable is their proviſion in this reſpect, that ſometimes two, three, or more ſmall places join to ſupport one, either alone or with a curate; ſo that ſome eccleſiaſtics have diſtant ſettlements under their care. Theſe incumbents are either ſeculars or regulars, according to the right acquired by each of theſe claſſes, as having been employed in the converſion of the Indians immediately after the Conqueſt.

CHAP. XII.

Of the Provinces in the Dioceſſes of TRUXILLO, GUAMANGA, CUSCO, *and* AREQUIPA.

NORTH of the archiepiſcopal dioceſs of Lima lies the biſhopric of Truxillo, and with it terminates on that ſide both the juriſdiction of that audience, and the vice-royalty of Peru; but the whole extent of this dioceſs is not under the juriſdictions of this audience, nor of that of the vice-roy; for it alſo includes the government of Jaen de Bracamoros, which, as we have already obſerved (Vol. I.) belongs to the province and audience of Quito. We ſhall therefore exclude it, and only give an account of the ſeven juriſdictions in the dioceſe of Truxillo belonging to the vice-royalty of Peru, and the audience of Lima.

Juriſdictions in the dioceſs of Truxillo.

I. Truxillo.

II. Sana. V. Chachapayas.
III. Piura. VI. Llulia, and Chilloas.
IV. Caxamarca. VII. Pataz, or Coxamarquilla.

I. II. III. A ſufficient account having already been given (Chap. I. II.) of the juriſdictions of Truxillo, Sana, and Piura, it only remains to ſpeak of the other four.

IV. Caxamarca lies to the eaſtward of Truxillo, and its juriſdiction extends along a vaſt interval betwixt the two Cordilleras of the Andes. It enjoys a fertility of all kinds of corn, fruits, and eſculent vegetables; alſo cattle, ſheep, and eſpecially hogs, of which they ſell vaſt numbers to the farmers in the valleys, who after fattening them with maize, ſend them to the markets in the great towns; particularly the farmers of the valley of Chincay and others, who drive a conſiderable trade in theſe creatures at Lima, Truxillo, and other flouriſhing places. The Indians throughout this juriſdiction weave cotton for ſhip's ſails, bed-curtains, quilts, and other uſes, which are ſent into the other provinces. Here are alſo ſome ſilver mines, but of little conſequence.

V. On the ſame ſide, but more towards the eaſt, lies the juriſdiction of Chachapoyas. Its temperature is hot, being without the Cordilleras, and to the eaſtward its territories have a low ſituation. It is of great extent, but very thinly inhabited; and the products of the earth only ſuch as naturally flouriſh in ſuch a climate. The Indians here are very ingenious in making cottons, particularly tapeſtry, which for the livelineſs of the colours, and delicacy of the work, make an elegant appearance: theſe, together with the ſail-cloth, bring great profits to this country, being highly valued in the other provinces.

VI. SOUTH of Chachapayas, and alſo on the eaſtſide of the cordillera of the Andes, lies the juriſdiction of Llulla and Chiloas, which is low, warm and moiſt, and covered with woods, ſo that great parts of it are uninhabited. It borders on the river of Moyabamba, which beginning its courſe from theſe ſouthern provinces of Peru, forms the river of the Amazones, as we have already obſerved.* The principal commodity of this country is tobacco, which, with a particular kind of almonds called andes, and a few other fruits natural to its climate, form the commerce carried on by this province with the others.

VII. THE laſt juriſdiction of this dioceſs is that of Pataz, or Caxamarquilla. From its different ſituations it has a variety of products: but is particularly remarkable for gold mines; its chief commerce conſiſting in exchanging that metal for current money, eſpecially ſilver coin, which is the more eſteemed here for its ſcarcity.

GUAMANGA the ſecond dioceſs.

THE city of Guamanga, the capital of this dioceſs, was founded in the year 1539, by Don Franciſco Pizarro, on the ſite of an Indian village of the ſame name. The Spaniards added the name of San Juan del la Victoria, in memory of the precipitate retreat of Manco the Ynca, from Pizarro, who offered him battle. This city was founded for the conveniency of the trade carried on between Lima and Cuſco; for during this long diſtance, there was at that time no town, whence the travellers frequently ſuffered by the incurſions of Manco's army. This gave occaſion to building the city on the ſpot where the Indian village ſtood, though extreamly inconvenient with regard to proviſions, as lying contiguous to the great chain of the Andes; but the war being happily terminated by the entire defeat of Manco's party, the city was removed to its preſent ſituation. Its juriſdiction, regulated at the time of its foundation, began at the frontiers of Joxa, and reached to the bridge of Valcas; but at preſent it is bounded by the provinces which ſurround it, and contains the town of Anco, about three leagues from it: the city is ſituated on the declivities of ſome mountains not remarkable for their height, which extending ſouthward incloſe a ſpacious plain to the eaſtward of the town, watered by a ſmall ſtream deſcending from the neighbouring mountains; but the ground on which the city is built, being higher than the breach through which the river flows, the inhabitants were obliged to provide themſelves with ſmall fountains. Among the number of inhabitants, Guamanga boaſts at leaſt of twenty noble families, who live in the center of the town, in ſpacious houſes of a conſiderable height, built partly of ſtone, and covered with tiles. Beſides the largeneſs of the apartment, they have extenſive gardens and orchards, tho' it is no ſmall difficulty to keep theſe in order, on account of the ſcarcity of water. The large Indian ſuburbs round the city, add greatly to its extent, and the houſes tho' low, are chiefly of ſtone, and roofed, which conſiderably augments the appearance of the city. This is indeed the general manner of building in the towns of this kingdom, remote from the coaſt.

The cathedral is very ſplendid, and its chapter, beſides the biſhop, conſiſts of a dean, archdeacon, chanter, two canons by compoſition, a penitentiary, and two prebendaries. It has a ſeminary for the ſervice of the church, under the title of St. Chriſtopher. The church of this ſeminary is that belonging to the pariſh of the Spaniards, and another dedicated to St. Ann, the pariſh church of the Indians. Beſides theſe are the chapels of Carmenca, Belin, St. Sebaſtian, and St. John the Baptiſt depending on it. The pariſh of Magdalena inhabited by Indians, is under the care of the Dominicans, and the incumbent has the title of prieſt. The city has alſo an univerſity, with profeſſors of philoſophy, divinity and law, and equal privileges with that of Lima, they being both royal foundations. The corporation is compoſed of the principal nobility of the city, at the head of which is the corregidor, and out of this body the Alcaldes are choſen, to ſuperintend the civil and political government.

Within the walls of this city are the convents of St. Dominic, St. Francis, the fathers of Mercy, St. Auguſtine, St. Juan de Dios, a college of Jeſuits, an hoſpital of St. Francis de Paula. The nunneries are of the orders of St. Clare, and the Carmelites; and a religious ſiſterhood.

The juriſdictions in the dioceſs of Guamanga, are

I. Guamanga.
II. Guanta.
III. Vilcas Guaman.
IV. Andogualas.
V. Guanca Belcia.
VI. Angaraes.
VII. Caſtio Vineyna.
VIII. Parina-Cocha.
IX. Lucanas.

I. The juriſdiction of Guamanga enjoys in every part, ſo good a temperature, that it abounds in variety of grain, fruit and cattle, and is very populous. One part of its commerce conſiſt in Bend leather for ſoles of ſhoes, which are cut out here. Conſerves and ſweetmeats are here made in great quantity.

II. The juriſdiction of Guanta which lies N. N. W. of Guamanga, begins a little above four leagues from that city; and is in length about thirty leagues. It is very happy in the temperature of the climate, and fertility of the earth; but its ſilver mines, which were formerly very rich, are now greatly exhauſted. In an iſland formed by the river Jauxa, called in that country Tayacaxa, grows in remarkable plenty the Caca already mentioned in Vol. I. This herb, and the lead produced from the mines of that metal in this country, are the branches of its commerce. It ſupplies the city of Guamanga with great part of its corn and fruits.

III. S. E. of Guamanga, and between ſix and ſeven leagues from that city is Vilcas Guaman, which extends above 30 leagues. The greateſt part of this country, lying in a temperate air, beſides a ſufficiency of corn, and fruits, and eſculent vegetables, has very fine paſtures, in which are bred vaſt quantities of cattle of all kinds. The Indians in the towns of this juriſdiction apply themſelves to weaving bays, corded ſtuffs, and other branches of the woollen manufactory, which are carried to Cuſco, and other provinces; but this trade is rendered very laborious by the great diſtance of the ſeveral places. Here is ſtill remaining a fort built by the old Indians, and reſembles that already deſcribed, Vol. I. near the town of Cannar; at the town of Vilcas Guaman was another, very famous, but taken down in order to erect a church with the ſtones.

IV. East a little inclining to the S. of Guamanga is Andaguaylas, extending eaſtward along an intermediate ſpace between two branches of the Cordillera, above twenty miles, having the advantage of being watered by ſeveral ſmall rivers. Its climate is partly hot, and partly temperate, ſo that the ſoil being watered by theſe ſtreams, produces all kinds of fruits and grain in great plenty, eſpecially maize, wheat and ſugar canes. This province is one of the moſt populous in all thoſe parts; in it the gentry of Guamanga have large ſugar plantations.

V. The government of Guanca Belica begins thirty leagues north of Guamanga. The town which gives name to this government, was founded on account of the famous rich quickſilver mine, and to the working of it, the inhabitants owe their whole ſubſiſtence; the coldneſs of the air checking the growth of all kinds of grains and fruits, ſo that they are obliged to purchaſe them from their neighbours. This town is noted for a water where ſuch large petrefications are formed, that the inhabitants uſe them in building houſes, and other works. The quickſilver mines wrought here, ſupply with that neceſſary mineral, all the ſilver mines of Peru; and notwithſtanding the prodigious quantities already extracted, no diminution is perceived. Some attribute the diſcovery of theſe mines to a Portugueſe, called Enrique Garces, in the year 1566, who accidentally met an Indian with ſome pieces of cinnaber, called by the Indians, Llimpi, and uſed in painting their faces. But others, among whom are Acoſta, Laett, and Eſcalona, ſay that the mines of Guanca Belica, were diſcovered by a Navincopa, or Indian, and ſervant to Amador Cabrera; and that before the year 1564, Pedro Contreras and Henrique Garces had diſcovered another mine of the ſame kind at Patas. But however it be, the mines of Guanca Belica are the only ones now worked; and the uſe of quickſilver for aggregating the particles of ſilver began in the year 1571, under the direction of Petro Fernandes Velaſco. The mines of Guanca Belica immediately on the diſcovery were claimed in the king's name, and alternately governed by one of the members of the audienza of Lima, with the title of ſuperintendant, whoſe office expired at the end of five years, till in the year 1735, when Philip V. appointed a particular governor of theſe mines, with the ſame title of ſuperintendant, but thoroughly acquainted with the nature of extracting this mineral, having been employed in thoſe of the ſame nature in Spain; and by his œconomy the mines are worked with leſs charge, and will not be ſo ſoon exhauſted. Part of the quickſilver found here, is ſold on the ſpot to miners, and the remainder ſent to all the royal offices of the kingdom of Peru, for the more commodious ſupply of thoſe whoſe mines are at a great diſtance.

VI. The juriſdiction of Angaraes, depends on the government of Guanca Belica, and begins about twenty leagues W. N. W. of the city of Guamanga. Its territories reach above twenty leagues; its air is temperate, and it abounds in wheat, maize, and other grains and fruits, and alſo breeds vaſt droves of cattle of all kinds.

VII. West of the city of Guamanga, is the juriſdiction of Caſtro Virreyna. In ſome parts this province extends above thirty leagues, and has ſuch a variety of temperatures, that it produces every kind of grain and fruits. The heaths which are the coldeſt parts, are frequented by a kind of ſheep called Vicunna, whoſe wool is the moſt conſiderable article of its commerce. This animal was alſo common in the provinces of Jauxa, Guanuco, and Chuquiabo, till the conqueſt of thoſe countries, when every one hunted them at pleaſure for the ſake of their wool, without reſtraint from the government, they became, as it were, exterminated in thoſe parts; now they are only to be found in the ſummits of mountains or the coldeſt heaths, where they are not caught without great difficulty.

VIII. About twenty leagues ſouth of the city of Guamanga, is the juriſdiction of Parina-Cocha, which reaches about twenty-five leagues; and lies principally in ſo temperate an air, that the ſoil, beſides excellent paſtures, abounds in grain and fruits. It has alſo ſeveral mines both of ſilver and gold, which now produce more conſiderably than heretofore. Theſe valuable metals make the chief branch of its active commerce; its paſſive being the ſame as in the following juriſdiction.

IX. The juriſdiction of Lucanas begins about twenty-five or thirty leagues ſouth-weſt of Guamanga. Its temperature is cold and moderate. The parts of the former breed large droves of all ſorts of cattle; and thoſe of the latter are fertile in grain, herbs and fruits. It alſo abounds in valuable ſilver mines, in which chiefly the riches of Peru conſiſt, and by that means made the center of a very large commerce; great numbers of merchants reſorting hither with their goods, and others for purchaſing ſuch proviſions as their own countries do not afford, for which they give in exchange ingots and pinnas of ſilver.

III. *Dioceſs of the audience of* Lima.

Cusco.

Of all the cities in Peru, Cuſco is the moſt ancient, being of the ſame date with the eaſt empire of the Yncas. It was founded by the firſt Ynca Mango Capac, as the ſeat and capital of his empire. Having peopled it with the firſt Indians who voluntarily ſubmitted to him, he divided it into two parts, which he called high and low Cuſco, the former having been peopled by Indians which the emperor himſelf had aſſembled, and the latter by thoſe whom his conſort Mama-Oello had prevailed upon to leave their wandring manner of life. The firſt forms the N. and the latter the S. part of the city. The houſes originally were low and ſmall like cottages; but as the empire encreaſed they aſſumed a new appearance; ſo that when the Spaniards landed in theſe parts, they were aſtoniſhed at the largeneſs and ſplendor of the city, eſpecially the magnificence of the temple of the ſun, the grandeur of the palaces of the Ynca, and the pomp and richneſs becoming the ſeat of ſo vaſt an empire. It was in the month of October 1534, when Don Franciſco Pizarro entered and took poſſeſſion of it in the name of Charles V. emperor, and king of Spain. This was followed by a ſiege of the Ynca Mango, who laid great part of it in aſhes, but without diſlodging the Spaniards.

This city ſtands in a very uneven ſituation on the ſides of the mountains, there being no other more convenient near it. On a mountain contiguous to the north part of the city are the ruins of that famous fort built by the Yncas for their defence; and it appears from thence, that the deſign was to incloſe the whole mountain with a prodigious wall, of ſuch conſtruction as to render the aſcent of it abſolutely impracticable to an enemy, and at the ſame time eaſily to be defended by thoſe within; in order to prevent all approach to the city. This wall was entirely of free ſtone, and ſtrongly built, like all the other works of the Yncas, deſcribed Vol. I. but ſtill more remarkable for its dimenſions and the largeneſs of the ſtones, which are of different magnitudes and figures. Thoſe compoſing the principal part of the work are of ſuch prodigious dimenſions, that it is difficult to imagine how it was poſſible for the ſtrength of man, unaſſiſted by machines, to have brought them hither from the quarries. The inteſtices formed by the irregularities of theſe enormous maſſes are filled with ſmaller, and ſo cloſely joined as not to be perceived without a very narrow inſpection. One of theſe large ſtones is ſtill lying on the ground, and ſeems not to have been applied to the uſe intended, and is ſuch an enormous maſs that it is aſtoniſhing to human reaſon to think by what means it could be brought thither. It is called la Canſada, or the troubleſome, alluding probably to the labour of bringing it from the quarry. The internal works of this fortreſs conſiſting of apartments, and two other walls are chiefly in ruins, but the outward wall is ſtanding.

The city of Cuſco is nearly equal to that of Lima. The north and weſt ſides, are ſurrounded by the mountain of the fortreſs, and others called Sanca: on the ſouth it borders on a plain, on which are ſeveral very beautiful walks. Moſt of the houſes are of ſtone, well contrived, and covered with tiles, whoſe lively red, gives them an elegant appearance. The appartments are very ſpacious, and finely decorated, the inhabitants being noted for their elegant taſte. The moldings of all the doors are gilt, and the other ornaments and furniture anſwerable.

The cathedral of Cuſco, both with regard to materials, architecture, and diſpoſition, greatly reſembles that of Lima, but is a much ſmaller ſtructure. It is built entirely of ſtone, and the architecture is even thought to exceed it. The Sacriſty is called Nueſtra Senora del Triumpo, being the place where the Spaniards defended themſelves from the fury of the Indians, when ſurrounded by the army of the Ynca Manco; and though the whole city was ſeveral times ſet on fire, the flames had no effect on this part; which has attributed to the ſpecial protection of the holy virgin. It is ſerved by three prieſts, one in particular for the Indians of the pariſh, and the other two for the Spaniards. Beſides this, Cuſco alſo contains eight other pariſhes; namely,

I. Belin. II. The church of the general hoſpital, which has alſo its prieſt and its pariſh. III. Santa Ana. IV. Santiago. V. San Blas. VI. San Chriſtoval. VII. San Sebaſtian. VIII. San Geronymo. And though the firſt of the two laſt be a league, and the ſecond two leagues from the city, they are reckoned among the number of its pariſhes.

Here is alſo a convent of Dominicans, the principal walls of which were formerly thoſe of the temple of the ſun, and at preſent the high altar ſtands in the very place, where once was a golden image of that planet. There is likewiſe at Cuſco a convent of Franciſcans, which is the head of that order in this province. The convents of the Auguſtines and the fathers of mercy in this city, are alſo the principal of their reſpective orders. The Jeſuits have likewiſe a college here. The convent of St. Juan de Dios and that of the Bethlemites, which are both very large, are hoſpitals for the ſick; the latter is particularly appropriated to the Indians, who are there uſed with the greateſt care and tenderneſs.

The nunneries are thoſe of St. Clare, St. Catherine, the barefooted Carmelites, and a Nazarine ſiſterhood.

The government of this city conſiſts of a corregidor, placed at the head of the magiſtrates, who are the chief nobility, and out of theſe are annually choſen two ordinary Alcaldes, according to the cuſtom of all the cities in ſouth America. The members of the cathedral chapter beſides the biſhop, are five dignitaries, namely, the dean, archdeacon, chanter, rector and treaſurer; two canons by competition, a magiſtral, and penetentiary; three canons by preſentation, and two prebendaries. Here are three colleges, in the firſt, called St. Anthony, a ſeminary for the ſervice of the cathedral, are taught latin, the ſciences and divinity. The ſecond is under the direction of the Jeſuits, where theſe fathers inſtruct youths of fortune. The third, called St. Francis de Borja, belongs alſo to the Jeſuits, and is appointed for the education of the ſons of Caziques, or Indian princes. The two former confer all degrees below that of doctor, and have been erected into univerſities.

Among the courts of juſtice, is one for the revenue, conſiſting of two judges. Here is alſo a court of inquiſition, and of the croiſade; together with the ſame offices as in the other large cities already deſcribed. Formerly this city was very full of Spaniards, and among them many noble families; but at preſent its inhabitants are very much declined.

Juriſdictions in the Dioceſs of Cusco.

I. Cuſco
II. Quiſpicanchi.
III. Avancay.
IV. Paucartambo.
V. Colcaylares.
VI. Chilques, and Maſques.
VII. Cotabamba.
VIII. Canas, and Cances, or Tinta.
IX. Aymaraes.

IX. Aymaraes.
X. Chumbi-Vilcas.
XI. Lampa.
XII. Carabaya.
XIII. Aſangaro, and Aſilo.
XIV. Apolo-Bamba.

I. The juriſdiction of Cuſco extends two leagues; the temperature of air is various, but both the heat and cold very ſupportable, except in ſome parts where the cold is intenſe: theſe, however, afford good paſture for all kinds of cattle, whilſt the vallies produce plenty of grain and fruits.

II. The juriſdiction of Quiſpicanchi, begins as it were at the ſouth gates of Cuſco, ſtretching from E. to W. about twenty leagues. The lands belong in general to the gentry of Cuſco, and produce plenty of wheat, maize, and fruits. Here are alſo manufactories of bays, and coarſe woollen ſtuffs. Part of this province borders on the foreſts inhabited by wild Indians, and produces great quantities of Coca, which forms one of the principal branches of its commerce.

III. Four leagues north-eaſt from the city of Cuſco, begins the juriſdiction of Avancay, and extends above thirty leagues; the air differing in temperature according to the ſituation of its parts; but is in general rather hot than temperate, and, accordingly, many parts of it are taken up with large plantations of canes, which yield a very rich ſugar. The lands where the air is more temperate, abound in wheat, maize and fruits, part of which are ſent to the city of Cuſco. In this province is the valley Xaquijaguana, corruptly called Xajaguana, where Gonzalo Pizarro was defeated and taken priſoner by Pedro de la Gaſco.

IV. Paucartambo begins eight leagues eaſt of Cuſco, and is of a conſiderable extent. This province produced in the time of the Yncas the greateſt quantity of Coca, with which it carried on a very profitable commerce; but is greatly declined ſince this ſhrub has been planted in other provinces. The ſoil is equally fertile in other products.

V. The juriſdiction of Calcaylares begins four leagues W. of the city of Cuſco. The air every where excels that of all the other provinces, and, accordingly produces an exuberance of all kinds of grain and fruits. In the hotteſt parts called Lares, were formerly very large plantations of ſugar canes, but for want of hands to cultivate them, they are at preſent ſo diminiſhed, that inſtead of ſixty or eighty thouſand arobas, which they annually produced in the time of their proſperity, they are now reduced to ſomething leſs than thirty; but the ſugar is of ſuch an excellent kind, that without any other preparation than that of the country, it is equal both in colour and hardneſs to the refined ſugar of Europe. This diminution of its ſugar, has greatly leſſened the principal branch of its commerce.

VI. S. E. of Cuſco, and at the diſtance of about ſeven or eight leagues, begins the juriſdiction of Chilques and Maſques, extending above thirty leagues in length. The temperature of the air is proportioned to the ſituation of its ſeveral parts, ſome of which are very fertile in grain, and others feed vaſt numbers of cows and ſheep. But beſides theſe its commerce is greatly augmented by the woollen manufactures of the Indians.

VII. S. W. of Cuſco, and about twenty leagues diſtance, begins the juriſdiction of Cotabamba, which afterwards extends above thirty leagues between the rivers Avancay and Apurimac: In which extent are different temperatures of air. It abounds in all kinds of cattle, and the temperate parts produce plenty of wheat, maize, and fruits. Here are alſo mines of ſilver and gold, the richneſs of which formerly rendered this province very flouriſhing; but at preſent their produce is greatly declined.

VIII. The juriſdiction of Canas and Canches or Tinta, begins about fifteen or twenty leagues S. of Cuſco, and extends about twenty leagues in every direction. The Cordillera divides it into two parts; the higheſt called Canas and the loweſt Canches. The latter by reaſon of its temperate air yields all kinds of grains and fruits; whilſt the former affords paſture for very numerous flocks and herds; and in the meadows between the eminences are fed no leſs than twenty five or thirty thouſand mules, brought thither from Tucuma to paſture. Here is a very great fair for theſe creatures, to which dealers reſort from all parts of the dioceſs. In the part called Canas is the famous ſilver mine Condonoma.

ABOUT forty leagues S. W. from Cuſco is the juriſdiction of Aymaraes, which extends thirty farther, and like the former has different temperatures of air. The lands abound in ſugar, cattle, and grain; and alſo in mines of gold and ſilver, which formerly produced large quantities of thoſe valuable metals; but at preſent few of them are wrought, the country being too thinly inhabited.

X. SOMETHING more than forty leagues from Cuſco, begins the juriſdiction of Chumbi Vilcas, which in ſome parts extends above thirty leagues, has different temperatures of air, great quantities of corn and fruits, and large herds of cattle; together with ſome mines of ſilver and gold.

XI. THE juriſdiction of Lampa begins thirty leagues S. of Cuſco, and is the principal of all the provinces included under the name of Callao. Its plains are interrupted with ſmall hills, but both abound in good paſture; and accordingly this province is particularly remarkable for its quantity of cattle, with which it carries on a very profitable trade; but the air being every where cold, the only fruits of the earth are Papas and Quincas. Another very conſiderable advantage are its ſilver mines, being very rich, and conſtantly worked.

XII. THE juriſdiction of Carabaya begins ſixty leagues S. E. of Cuſco, and extends above fifty leagues.

The greateſt part of it is cold; but the valleys ſo warm as to produce Coca, and abounds in all kinds of fruits, grain, and pulſe, together with ſufficient paſtures for cattle of all kinds. Here are ſeveral gold mines, and the two famous lavatories, called Lavaderos de San Juan del Oro, and Pablo Coya; alſo that of Monte de Ananea, two leagues from the town of Poto, where there is an office for collecting the Quintos or fifth, belonging to the king. In this province alſo is a river, which ſeparates it from the mountains of the wild Indians, and is known to abound ſo greatly in gold, that at certain times the Caziques ſend out a certain number of Indians in companies from the towns in their reſpective diſtricts to the banks of this river, where by waſhing the ſands in ſmall wells they dig for that purpoſe, they ſoon find a ſufficient quantity of gold to pay the royal tribute. This kind of ſervice they call Chichina. This province has alſo mines of ſilver, which produce vaſt quantities of that metal. In 1713 was diſcovered in the mountain of Ucuntaya a vein or ſtratum nearly of ſolid ſilver, which though ſoon exhauſted, yielded ſome millions, and hopes have been conceived from it of meeting with others, whoſe riches will be of a longer continuance. This juriſdiction is alſo famous for the gold mine called Aporama, which is very rich, and the metal twenty three carats fine.

XIII. The juriſdiction of Aſangaro and Aſilo, which lies about fifty leagues S. of Cuſco, is every where cold, and conſequently proper only for breeding cattle, in which, however, it carries on a very profitable trade. In the N. E. parts which border on thoſe of Caravaya, are ſome ſilver mines, but a few of them only are worked. Some of its lands produce plenty of thoſe roots and grains which naturally flouriſh in a cold air, as Papas, Quinoas, and Canaguas; of the two laſt the natives makes Chica in the ſame manner as it is made with maize. This juriſdiction belongs to the audience of Charcas.

XIV. About ſixty leagues from Cuſco, on the borders of the Moxos, which are miſſions of the Jeſuits, are others called Apolo-bamba, belonging to the Franciſcans. Theſe conſiſt of ſeven towns of Indians newly converted, and who having received the doctrine of the goſpel, have abandoned the ſavage manner in which they formerly lived. In order to render the miſſionaries more reſpected by the Indians, and at the ſame time to defend the latter from the inſults of their idolatrous brethren, a major general is poſted here, who is both a civil and military officer, adminiſtring juſtice, and commanding in chief the ſeveral bodies of militia formed by the inhabitants of theſe towns and villages.

IV. Dioceſs of the Audience of LIMA.

AREQUIPA.

THE city of Arequipa was founded in 1539 by order of Don Franciſco Pizarro, in a place known by the ſame name; but this ſituation being found very diſadvantageous, the inhabitants obtained permiſſion to remove it to the valley of Quilca, where it at preſent ſtands about twenty leagues diſtant from the ſea. The lands in its dependency having been united to the empire of the Yncas by Maita Capac, the goodneſs of the ſoil and the purity of the air induced that monarch, for the farther improvement of the country, to draw 3000 families from ſuch adjacent provinces as were leſs fertile, and with theſe to people four or five towns.

THIS city is one of the largeſt in all Peru, delightfully ſituated in a plain, and the houſes well built of ſtone, and vaulted They are not all of an equal height, though generally lofty, but commodious, finely decorated on the outſide, and neatly furniſhed within. The temperature of the air is remarkably good: and though ſometimes a ſmall froſt is ſeen, the cold is never exceſſive, nor is the heat troubleſome; ſo that the fields are always cloathed with verdure and enamelled with flowers, as in a perpetual ſpring. The inhabitants enjoy an exemption from many diſeaſes common in other countries, partly owing to their care in keeping the ſtreets clean by means of canals which extend to a river running near the city; and by theſe all the filth of the city is ſwept away.

But theſe pleaſures and advantages are allayed by the dreadful ſhocks of earthquakes, to which, in common with all thoſe parts of America, it is ſo ſubject, that it has been four times by theſe convulſions of nature laid in ruins; beſides other ſmall ſhocks not attended with ſuch terrible conſequences. The firſt of thoſe was felt in 1582; the ſecond on the 24th of February 1600, which was accompanied with an eruption of a volcano called Guayna-Patina, in the neighbourhood of the city; the third happened in 1604, and the laſt in 1725. And tho' the deſolation attending the three laſt was not ſo univerſal, yet the public buildings, and the moſt ſtately houſes were laid in ruins.

The city is very populous, and among its inhabitants many noble families, this being the place where moſt of the Spaniards ſettled, on account of the goodneſs of the air, and the fertility of the ſoil; as alſo for the conveniency of commerce at the port of Aranta, which is only twenty leagues diſtant. The civil, political and military government of the city is executed by a corregidor, who is placed at the head of the regidores, from which are annually choſen two ordinary Alcaldes.

The city of Arequipa did belong to the dioceſs of Cuſco, till the year 1609, when it was erected into a particular biſhoprick on the 20th of July. The chapter beſides the biſhop conſiſt of the five uſual dignitaries, namely, the dean, archdeacon, chantor, rector, and treaſurer; three canons and two prebends. Beſides the ſacriſty, which is ſerved by two prieſts for the Spaniards, the pariſh of Santa Martha is appropriated to all the Indian inhabitants. Here are two Franciſcan convents, one of obſervants, and the other of recollets, both belonging to the province of Cuſco; alſo one of Dominicans, and another of Auguſtines, depending on Lima; and a monaſtery of the fathers of mercy, ſubordinate to that of Cuſco. Under their reſpective fraternities of Lima here is alſo a college of Jeſuits, and a convent and hoſpital of St. Juan de Dios. Here is a ſeminary for the ſervice of the cathedral; and two nunneries; namely, one of the Carmelites, and the other of St. Catharine. A third is now building for the order of Santa Roſa. There is alſo at Arequipa an office of revenue, under the direction of an accomptant and treaſurer; together with commiſſaries of the inquiſition and croiſades, with their ſubalterns, as in all the other cities.

Juriſdictions in the Dioceſs of AREQUIPA.

I. Arequipa.
II. Camana.
III. Condeſuyos de Arequipa.
IV. Caylloma.
V. Monquegua.
VI. Arica.

I. AREQUIPA, comprehends the ſuburbs and towns in its neighbourhood, where the climate being the ſame as in the city, the country is perpetually covered with flowers, corn, and fruits; while the excellence of the paſtures is ſufficiently evident from the numbers of fine cattle fed in them.

II. ALONG the coaſt of the South-Sea, but at ſome diſtance from the ſhore is the juriſdiction of Camana, which is very large, but contains many deſerts, eſpecially along the coaſt. Eaſtward it extends to the borders of the Cordillera; ſo that the temperature of ſome parts of its juriſdiction is nearly the ſame with that of the former, while others are cold; both producing the grain and fruits of a correſpondent nature. Its principal trade conſiſts in aſſes. It has ſilver mines near the mountains, but of little advantage, as they are not worked.

III. N. of Arequipa and thirty leagues diſtant from that city, is the juriſdiction of Condeſuyos de Arequipa, extending about thirty leagues, with different temperatures of the air, and conſequently produces grains and fruits. Here is bred the wild Cochineal, with which the Indians carry on a kind of trade with thoſe provinces where the woollen manufactures flouriſh. They firſt pulverize the Cochineal by grinding, and after mixing four ounces of it, with twelve of violet maize, they form it into ſquare cakes called Mango, each weighing four ounces, and ſell it for a dollar per pound. This country abounds in gold and ſilver mines; but they are not worked with the care and diligence of former times.

IV. At about thirty leagues eaſt from the city of Arequipa, begins Caylloma, famous for a mountain of the ſame name, and the ſilver mines it contains. Though theſe mines have been long diſcovered and conſtantly and induſtriouſly worked, their produce is ſtill ſo conſiderable, that in the principal village, called by the ſame name, there is a governor and office appointed for receiving the king's fifths, and vending the quickſilver uſed in ſeparating the metal from the ore. The cold in the greateſt part of the country is ſo intenſe, that the inhabitants are obliged to have recourſe to the neighbouring provinces, for the fruits of the earth. Even the declivities of mountains and valleys produce but little. In ſome parts of this province are wild aſſes, like thoſe already mentioned in Vol. I.

V. The juriſdiction of Monquegua lies about forty leagues S. of the city of Arequipa, and ſixteen from the coaſt of the South-ſea. The principal town, which bears the ſame name, is inhabited by Spaniards, and among them ſeveral noble and opulent families. This juriſdiction extends at leaſt forty leagues in length, and in a happy climate, adorned with large vineyards, from the produce of which great quantities of wine and brandy are made; theſe conſtitute its whole commerce, ſupplying all the provinces bordering on the Cordilleras as far as Potoſi, by land carriage; while they are exported by ſea to Callao, where they are greatly valued. Here are alſo Papas and Olives.

VI. The laſt juriſdiction of this dioceſs is Arica, which extends along the coaſt of the South-ſea. Beſides the heat, and inclemency of the air, the greateſt part of the country is barren, producing only Aji, or Guinea pepper, from which alone it drives a very advantageous trade, as may eaſily be imagined from the vaſt conſumption of it in all theſe parts of America. Accordingly the dealers in this commodity reſort hither from the provinces on the other ſide of the mountains, and by computation, the annual produce of theſe plantations amount to no leſs than 60000 dollars per annum. The pods of this pepper are about a quarter of a yard in length, and when gathered are dried in the ſun, and packed up in bags or ruſhes, each bag containing an aroba, or quarter of a hundred weight; and thus they are exported to all parts of the kingdom, and uſed as an ingredient in moſt of their diſhes. Other parts of this juriſdiction are famous for vaſt quantities of large and excellent olives, far exceeding the fineſt produced in Europe, being nearly as large as a hen's egg. They extract ſome oil from their olives, and find a good market for it in the provinces of the Cordillera; others are pickled, and ſome, together with a ſmall quantity of oil, exported to Callao.

CHAP. XIII.

Of the Audience of CHARCAS.

THE province of Charcas, in the extent of its juriſdiction, is equal to that of Lima; but with this diſadvantage, that many of its parts are not ſo well inhabited, ſome being full of the vaſt deſarts and impenetrable foreſts; while others are full of vaſt plains, intercepted by the ſtupendous heights of the Cordilleras, ſo that it is inhabited in thoſe parts only which are free from theſe inconveniences. The name of Charcas formerly included many populous provinces of Indians, whom the Ynca Capac Yupanqui ſubjected to his empire; but he carried his arms no farther than the provinces of Tutyras and Chaqui, where he terminated his conqueſts towards Callaſuyo. On the death of this monarch, his ſon, Ynca Roca, the ſixth in the ſucceſſion of thoſe emperors, puſhed his conqueſts farther in the ſame part, till he became ſovereign of all the intermediate nations to the province of Chaquiſaca, where was afterwards founded the city of Plata, at preſent the capital of the whole province of Charcas. Its juriſdiction begins on the north ſide, at Vilcanota, belonging to the province of Lampa in the dioceſs of Cuſco, and reaches ſouthward to Buenos Ayres. Eaſtward it extends to Braſil, being terminated by the meridian of demarcation; and weſtward part of it reaches to the ſouth-ſea, particularly at Atacama, the moſt northern part of it on this ſide. The remainder of Charcas borders on the kingdom of Chili. Theſe vaſt tracts of land give one archbiſhop and five biſhops his ſuffragans, namely,

The archbiſhop of PLATA.

Biſhopricks.

I. La Pas. II. Santa Cruz de la Sierra.

III. Tucuman. IV. Paraguay.
V. Buenos Ayres.

Archbiſhoprick of the Audience of Chacas, or Chuquiſaca.

La Plata.

The Spaniards having conquered all the provinces between Tumbez and Cuſco, and quelled the tumults fomented among the conquerors themſelves, turned their thoughts on reducing the more remote nations. Accordingly in the year 1538, Gonzalo Pizarro, and other commanders, marched from Cuſco at the head of a large body of troops, and advancing as far as Charcas, were oppoſed by the nations inhabiting this country, and the Carangues, with ſuch vigour, that it was not till after ſeveral obſtinate battles that they ſubmitted. But their reſiſtance did not equal that made by the Chuquiſacas; for Pizarro having, after ſeveral actions, penetrated to their principal town, they beſieged him in it, and the danger was ſo great, that without the ſpeedy ſuccours ſent him from Cuſco by his brother the marquis Don Franciſco Pizarro, the few Spaniards who ſurvived the former actions would have been all cut off. But on the arrival of this reinforcement, among which were a great number of volunteers of diſtinction, he routed the Indians, who being no longer able to continue the war, ſubmitted, and acknowledged the ſovereignty of the king of Spain. In the following year 1539, Pizarro convinced of the importance of making a ſtrong ſettlement there, commiſſioned captain Pedro Anzures to build a town, which was accordingly done on the ſite of that of Chuquiſaca, and great numbers of thoſe who had ſhared in the conqueſt, continued there in order to ſubdue the other contiguous nations. This town they called Plata, alluding to the ſilver mines of the mountain of Porco in its neighbourhood, and from which the Yncas received great quantities of ſilver, keeping in pay a proper number of Indians for working them; but the primitive name of Chuquiſaca has prevailed, and is now commonly uſed. This city ſtands in a ſmall plain environed by eminences which defend it from the winds. The temperature of the air in ſummer is very mild; nor is there any conſiderable difference throughout the year; but in the winter which here begins in September and continues till March, tempeſts of thunder and lightning are very common, and the rains of long continuance; but all the other parts of the year the atmoſphere is bright and ſerene. The houſes both in the great ſquare and thoſe adjoining to it have one ſtory beſides the ground floor. They are covered with tiles, are very roomy and convenient, with delightful gardens planted with the fruits of Europe. But water is ſo ſcarce that they have hardly enough to ſupply the neceſſary purpoſes of life: the little they have being fetched from ſeveral public fountains diſperſed in different parts of the city. The inhabitants conſiſt of Indians and Spaniards, and are ſaid to amount to about 14000.

The cathedral is large, and divided into three aiſles, of good architecture, and finely adorned with paintings and gildings. The pariſh is ſerved by two prieſts, one for the Spaniards, and the other for the Indians. Here is alſo another pariſh called St. Sebaſtian, ſituated at one end of the city, and is appropriated to the Indians living within its precinct, who are thought to be about three thouſand. The convents are thoſe of the Franciſcans, Dominicans, Auguſtines, the fathers of mercy, and a college of Jeſuits; all ſpacious buildings with ſplendid churches. Here is alſo a conventual hoſpital of St. Juan de Dios, the expences of which are defrayed by the king; likewiſe two nunneries, of the order of St. Clare, and of St. Monica.

The city of la Plata has alſo an univerſity, dedicated to St. Francis Xavier, the chairs of which are filled indifferently either by ſecular clergy or laymen; but the rector is always a Jeſuit. Here are alſo two other colleges in which lectures of all kinds are read. That of St. John is under the direction of the Jeſuits; while the archbiſhop nominates to that of St. Chriſtopher, which is a ſeminary.

Two leagues from Plata runs the river Cachimayo along the plains, having on its banks ſeveral pleaſant ſeats of the inhabitants; and about ſix in the road leading to Potoſi, is the river of Philco-mayo, which is paſſed over by a large ſtone bridge. During ſome months of the year this river furniſhes the city of Plata with great plenty of delicious fiſh; among which is one called the Dorado, * which generally weighs between twenty and twenty-five pounds. The other proviſions, as bread, fleſh and fruits, are brought from the adjacent provinces.

The chief tribunal in Plata is that of the Audience, erected in the year 1559, and whoſe preſident has the titles of governor and captain-general of the province, excluſive of the government of Santa Cruz de la Sierra, Tucuman, Paraguay and Buenos Ayres, which are independent, and in military caſes abſolute. It has alſo a Fiſcal, a protector-fiſcal of the Indians, and two ſupernumerary auditors.

The magiſtracy or corporation, as in all other cities of this country, conſiſts of regidores, who are perſons of the firſt diſtinction, with the Corregidor at their head, and from them are annually choſen two ordinary Alcaldes, for maintaining order and the police. Plata was erected into a biſhopric in 1551, the place having then the title of city; and in the year 1608 was raiſed to a metropolis. Its chapter conſiſts

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* This is a larger ſpecies of the Dolphin, which, without plenty of good ſauce, is very dry eating. A.

of a dean, archdeacon, chantor, treaſurer and rector; five canons, four prebendaries, and four minor prebendaries. The archbiſhop and his chancellor conſtitute the eccleſiaſtical tribunal.

Here is alſo a tribunal of Croiſade, with a commiſſary, ſubdelegate, and other officers: likewiſe a court of inquiſition ſubordinate to that of Lima, and an office for taking care of the effects of perſons dying inteſtate; all eſtabliſhed on the ſame foundation with thoſe in other cities already mentioned.

The juriſdictions belonging to the archbiſhopric of Plata, are the fourteen following:

I. The city of Plata, and Imperial Town of Potoſi.
II. Tomina.
III. Porco.
IV. Tarija.
V. Lipes.
VI. Amparaes.
VII. Oruro.
VIII. Pilaya, and Paſpaya.
IX. Cochabamba.
X. Chayantas.
XI. Paria.
XII. Carangas.
XIII. Cuacica.
XIV. Atacama.

I. The juriſdiction of the city of Plata is of ſuch prodigious extent at to include the imperial town of Potoſi, which is even the continual reſidence of the Corregidor. There alſo is eſtabliſhed the office of revenue, which conſiſts of an accountant and treaſurer, with clerks; as moſt convenient on account of its vicinity to the mines, for taking account of the ſilver produced by them.

The famous mountain of Potoſi, at the foot of which on the ſouth-ſide ſtands the town of the ſame name, is known all over the commercial world, as having been greatly enriched by the ſilver it produces. The diſcovery of theſe immenſe mines happened in the year 1545, by an accident ſeemingly fortuitous. An Indian, by ſome called Gualca, and by others Hualpa, purſuing ſome wild goats up this mountain, and coming to a part very ſteep, he laid hold of a ſmall ſhrub in order to climb it with the greater celerity; but the ſhrub being unable to ſupport his weight came up by the roots, and diſcovered a maſs of fine ſilver; and at the ſame time he found ſome lumps of the ſame metal among the clods, which adhered to the roots. This Indian, who lived at Porco, haſtened home with theſe firſt fruits of his diſcovery, waſhed the ſilver and made uſe of it, repairing when his ſtock was near exhauſted, to his perpetual fund. At length an intimate friend of his called Guanca, obſerving ſuch a happy change in his circumſtances, was deſirous of knowing the cauſe, and urged his queſtions with a warmth, that Gualca was unable to deny. For ſome time they retired in concert to the mountain for freſh ſupplies of ſilver, till Gualca refuſing to diſcover his method of purifying the metal, Guanca revealed the whole ſecret to his maſter Villarroel, a Spaniard who lived at Porco. Immediately on this information he went on the 21ſt of April, 1545, to view this fortunate breach in the mountain, and the mine was without delay worked, with immenſe advantage.

This firſt mine was called the Diſcoverer, as having been the occaſion of diſcovering other ſources of riches incloſed in the bowels of this mountain; for in a few days another was found equally rich, and called the Tin-mine: ſince that another has been diſcovered, and diſtinguiſhed by the name of Rica, as ſurpaſſing all the reſt: and was ſucceeded by the Mendieta. Theſe are the principal mines of Potoſi, but there are ſeveral ſmaller croſſing the mountain on all ſides. The ſituation of the former of theſe mines is on the north ſide of the mountain, their direction being to the ſouth, a little inclining to the weſt; and is the opinion of the moſt intelligent miners in this country, that thoſe which run in theſe directions are the richeſt.

On a report of theſe important diſcoveries people from all parts retired to Potoſi, particularly from the city of Plata, which is ſituated about twenty five leagues from the mountains; ſo that at preſent, beſides its extraordinary riches, having among its inhabitants many noble families, particularly thoſe concerned in the mines, the circuit of the town is near two leagues. The air of the mountain being extremely cold and dry,* renders the adjacent country remarkably barren, producing neither grain, fruits, herbs, or other eſculents. The town, however, is ſo plentifully provided as to enjoy an abundance of every kind; and the trade for proviſions is greater here than in any other place, that of Lima alone excepted. Nor will this appear at all ſtrange if the great number of people employed in the mines be conſidered. Some provinces ſend the beſt of their grain and fruits; others their cattle; others their manufactures; and thoſe who trade in European goods reſort to Potoſi, as to a market where there is a great demand, and no want of ſilver to give in exchange.

Besides this commerce, here are a ſet of perſons called Aviadores, who find their account in advancing to the maſters of the mines coined ſilver to pay their neceſſary expences, receiving in exchange ſilver in ingots and pinnas. Another article of great conſequence, is the trade of quickſilver for the uſe of theſe mines; but this branch the crown has reſerved to itſelf. The vaſt conſumption of this mineral may in ſome meaſure be conceived by the great quantity of ſilver produced by theſe mines; for before the invention of extracting the ſilver with leſs mercury, a mark of that mineral was conſumed in obtaining a mark of fine ſilver; and often by the ignorance of the workmen, a ſtill greater quantity; but the immenſe conſumption of quickſilver in the mines of this mountain, and the riches extracted from it, will beſt appear from the following accounts, of two authors, who were perfectly maſters of the ſubject. The firſt is that of the Rev. Alonzo Barba, pariſh prieſt in the imperial town of Potoſi, who, in a piece on metals publiſhed in the year 1637, ſays, that from the year 1574, when mercury was firſt uſed here in extracting the ſilver, the royal office of Potoſi has received above 204700 quintals of mercury, excluſive of what had been clandeſtinely bought by private perſons, and which amounted to no ſmall quantity. And as this was conſumed in the ſpace of ſixty-three years, the annual amount is about 3249 quintails. The ſecond account is given us by don Gaſper de Eſcalona, who in his Gozophilacio Perubico, declares, from very good authority, that before the year 1638, it appeared by the public accounts, that the produce of the ſilver amounted to 395619000 dollars, which in ninety three years, the time it had then been diſcovered, amounted to 41255043 dollars per annum. Hence an idea may be formed of the vaſt commerce, which has for many years been carried on in this town, and which is ſtill like to continue for a long time: ſuch enormous ſums being annually bartered for goods ſent hither, its whole trade conſiſting in ſilver extracted from this mountain; and if ſome diminution has been perceived in its produce, it is ſtill very conſiderable.

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* The extremeſt cold in this part ſeldom freezes the waters thicker than an half crown.

At a ſmall diſtance from Potoſi are the hot medicinal baths called Don Diego, whither, as in other countries, ſome reſort for health, and others for diverſion.

The juriſdiction of Tomina, begins about eighteen leagues ſouth-eaſt from the city of Plata, borders eaſtward on a nation of wild Indians called Chiriguanos.

The climate is hot, and conſequently its products are ſuch as are common to hot countries. Some parts have vineyards, and in others are made conſiderable quantities of ſugar. It abounds alſo in cattle and ſheep. The extent in ſome parts is near forty leagues. The vicinity of the Chiriguanos is a continual uneaſineſs to the towns in this juriſdiction, and even to the city of Plata itſelf, they having more than once attempted to ſurprize it.

III. The juriſdiction of Porco begins at the weſt ſide of the town of Potoſi, and about 25 leagues diſtance from the city of Plata; extending about 20 farther. The coldneſs of its ſituation occaſions a ſcarcity of grain and fruits; but, on the other hand, it abounds in fine cattle of all ſorts. In this juriſdiction is the mountain of Porco, whence it has its name, and from whoſe mines the Yncas, as I have already obſerved, extracted all the ſilver for their expences and ornaments; and accordingly was the firſt mine worked by the Spaniards after the conqueſt.

IV. About 30 leagues ſouth of Plata lies the juriſdiction of Tarija, or Chicas, the greateſt extent of which is about 35 leagues. The temperature of the air is various, being in ſome parts hot, and in others cold; whence it has the advantage of corn, fruits, and cattle. This country every where abounds in mines of gold and ſilver, and eſpecially that part called Chocayas. Between this province and the country inhabited by wild Indians, runs the large river Tipuanys, the ſands of which being mixed with gold, are waſhed like thoſe of the river Caravaga, already mentioned.

V. In the ſame part as the former, but with a ſmall inclination towards the ſouth-weſt, is the juriſdiction of Lipes, and extends alſo thirty-five leagues. The air is extremely cold, ſo that grain and fruit thrive very little here, but it abounds in cattle, particularly thoſe natural to the country, as the Vicuna, Alpaca, or Taruga, and the Llama. It muſt, however, be obſerved that theſe creatures are common to all the other provinces of Punas, that is, to thoſe where the heaths and mountains are of ſuch a height, as to render the air continually cold. Here are alſo mines of gold, but at preſent forſaken, tho' the remains of the old works are ſtill viſible, particularly in one of the mountains near Colcha, known by the name of Abetanis, which in the Indian language ſignifies a golden mine. That of St. Chriſtopher de Acochala was formerly one of the moſt famous in all Peru, for the richneſs of its ſilver mines, the metal being in ſome parts cut out with a chiſſel; but now very greatly declined; which may in a great meaſure be imputed to a want of people for working them; it being highly probable that the ſame work would ſtill produce nearly an equal quantity of that valuable metal.

VI. THE juriſdiction of Amparaes begins at a little diſtance to the eaſtward of the city of Plata, and is terminated on the eaſt by the juriſdictions belonging to the dioceſs of Santa Cruz de la Sierra, particularly on that of Miſquepocona; and the corregidor of the province of Amparaes has the cognizance of the Indian inhabitants of Plata. Its warm parts abound in grain, particularly barley, which together with the numerous droves of cattle in the colder parts, conſtitute the chief branches of its trade.

VIII. NORTH-WEST of Plata is the province of Oruro, whoſe capital San Phelipe de Auſtria de Oruro is 30 leagues diſtant from it. The greateſt part of this juriſdiction is ſo cold as to deny it any eſculent vegetables; but on the other hand it feeds numerous flocks and herds, beſides great numbers of cattle peculiar to the country, as Vicunas, Guanacos, and Llamas. Here are alſo many gold and ſilver mines; the former, tho' known even in the time of the Yncas, have been ſeldom worked; but thoſe of ſilver have yielded great riches to the inhabitants of the province. They are now however, according to all appearance, under an irremediable decay, being overflowed, and all the endeavours hitherto uſed, in order to drain them, have proved ineffectual; ſo that thoſe of any conſideration at preſent are in the mountains of Popo, about twelve leagues from the town, which is large and very populous from the trade carried on there with the mines. It has a revenue office for collecting the fifths belonging to the crown.

VIII. The province of Pilaya and Paſpaya, or Cinti, lies ſouth of Plata, diſtance about 40 leagues. The greateſt part of its juriſdiction being among the breaches of the mountains, is the better adapted for producing all kinds of grain, pulſe, and fruits; which, with the great quantity of wine made here, enable it to carry on a very lucrative commerce with the other provinces, which are not ſo happily ſituated.

IX. The province of Cochabamba, lies fifty leagues ſouth eaſt of Plata, and fifty-ſix from Potoſi. Its capital is one of the moſt conſiderable cities in Peru, with regard to largeneſs, and the number and wealth of its inhabitants. The province in ſome directions extends above forty leagues. Beſides the ſituation of the city in a moſt fertile plain, the whole country is ſo fertilized by the many rivers and ſtreams, which every where traverſe it, that this province is eſteemed the granary of the whole archbiſhoprick, and even of the dioceſs de la Paz. The air alſo is in moſt parts very mild and pure; and in ſome ſpots ſilver mines have been diſcovered.

X. About fifty leagues north-weſt from the city de la Plata, lies the province of Chayanta, extending in ſome parts about forty leagues. This country is very famous for its gold and ſilver mines. The former are indeed at preſent diſcontinued, though the antient ſubterraneous paſſages are ſtill open. This province is watered by the river Grande, in whoſe ſand conſiderable quantities of gold duſt, and grains of that metal are found. The ſilver mines are ſtill worked to great advantage; but with regard to cattle, this province feeds no more than are barely ſufficient for its inhabitants.

XI. The contiguous province to that of Chayanta, on the north-weſt ſide of Plata, and ſeventy leagues diſtant from that city, is that of Paria, the extent of which is about forty leagues. The air here is cold, ſo that it produces little grain, which is in ſome meaſure compenſated by the great plenty of cattle of all kinds; and the cheeſes made here, both from the milk of ſheep and cows, are ſo highly eſteemed, that they are ſent into every part of Peru: It has alſo ſome ſilver mines. The name of this province is derived from a very large lake, being an arm of that prodigious collection of waters called Titi-caca, or Chucuito.

XII. The Province of Carangas, begins ſeventy leagues weſt from the city of Plata, and extends above fifty leagues. The climate of this juriſdiction is ſo cold, that the only eſculent vegetables here are the Papa, Quinoa, and Canagua; but it abounds in cattle. Here are a great number of ſilver mines conſtantly worked; among which that called Turco is very remarkable for a ſort of ore termed by miners Machacado; the fibres of the ſilver forming an admirable intertexture with the ſtone in which they are contained. Mines of this kind are generally the richeſt. Beſides this there are others in this juriſdiction, which if not richer, are equally remarkable; and theſe are found in the barren ſandy deſerts extending towards the coaſt of the South-Sea. And here, only by digging in the ſands, are found detached lumps of ſilver, not mixed with any ore or ſtone, than what adheres in ſome parts to the metal. Theſe lumps are called Papas, being taken out of the ground, in the ſame manner as that root. It is doubtleſs very difficult to account for the formation of theſe maſſes of ſilver, in a barren and moveable ſand, remote from any ore or mine. Two conjectures may, however, be offered. The firſt by admitting the continual reproduction of metals, of which there are indeed here ſo many evident proofs; as the matrices of gold and ſilver, met with in many parts of this kingdom. Nay the very mines themſelves, after being long forſaken, have again been worked with great advantage; but the ſkeletons of Indians found in old mines, and covered with fibres of ſilver, and the inward parts alſo full of the ſame metal, ſeem to put the matter beyond diſpute. If this be admitted, it is natural to conclude, that the premordial matter of ſilver is firſt fluid, and when it has acquired a certain degree of perfection, ſome parts of it are filtrated through the pores of the ſand, till ſtopping in a place proper for compleating the fixation, they there form a ſolid congeries of ſilver; and being joined with thoſe earthy particles they collected in their courſe to the place where they were abſorbed by the pores of the ſand, conſolidated with the ſilver.

Tho' this conjecture be not deſtitute of probability, yet I am more inclined to embrace the ſecond, as it is, in my opinion, more ſimple and natural. Subterraneous fires being very common in theſe parts of America, as I have already obſerved in ſpeaking of the earthquakes, their activity is doubtleſs ſo ſtrong as to melt any metals depoſited near the places where they begin; and to communicate to them a heat ſufficient for keeping them a long time in a ſtate of fuſion; and hence a portion of ſilver thus melted neceſſarily ſpreads, and introduces itſelf through the larger pores of the earth, and continues to expand itſelf, till being beyond the reach of the heat, it fixes, and re-aſſumes its former conſiſtency, together with other heterogeneous ſubſtances collected in its paſſage. To this hypotheſis, two objections may be offered;

one that the metal in fuſion by changing its ſituation, muſt be expoſed to the cold air, and, conſequently, ſoon condenſe. The ſecond that the pores of the earth being extremely minute, particularly in a ſandy ſoil, the ſilver ſhould rather be found in filaments, or fine ramifications, than in large lumps or pieces, as is really the caſe. To both theſe objections I ſhall endeavour to give a brief but ſatisfactory anſwer.

Before the ſilver begins to run from the place where it was melted, the ſubterraneous fire had pervaded the pores of the earth, which by the dilatation of the body of air incloſed in them, became diſtended; the metal immediately follows, and finding a channel ſufficiently capacious for introducing itſelf, farther compreſſes the particles of the earth contiguous to thoſe it abrades, and, conſequently, continues its courſe without obſtruction. The ſubterraneous fire which preceded the fuſion, communicates to the earth a degree of heat ſufficient to expel the cold air, ſo that the metal runs through it, till by degrees, the heat is abated, and the metal becomes fixed. Another circumſtance which contributes to prolong the heat, is, there being often no ſpiracle to theſe paſſages, whence the earth through which the metal flows, does not ſoon emit the firſt heat it contracted from the ſubterraneous fire; conſequently the metal will not be fixed till at a conſiderable diſtance from the place of liquidation; but the firſt particles of the metal being checked by the cold they have gradually contracted, thoſe which follow flow to the ſame place, and there forms a concreted maſs, or mixed body of ſilver and ſcoria, brought with it from the original mine. It now remains that we examine whether what is actually obſerved in theſe lumps of ſilver, agrees with what has been advanced, in order to determine whether this opinion have a probable foundation.

These papas, or lumps of ſilver, are of a different compoſition from thoſe found in the mines, having all the appearances of melted ſilver, as any perſon, a ſtranger to the manner of finding them, would immediately conclude. In them the ſilver forms a maſs, and the ſurface is covered over with terrene particles, few or none of which are mixed with the ſilver; conformable to what is ſeen in metals melted, and ſuffered to cool without ſeparating the droſs. The terrene particles adhering to the ſilver are black, and exhibit all the marks of calcination, except that in ſome it is ſtronger than in others; and as this muſt happen if the lumps are formed by the fuſion of the metal, it ſeems natural to conclude that they were really formed in this manner.

The ſize and figure of theſe lumps are very different; ſome weighing about two marks, and others much more; for among ſeveral which I ſaw at Lima were two, one weighing 60, and the other above 150 marks, being a Paris foot in length; theſe indeed were the largeſt ever ſeen here. Theſe lumps of ſilver are found in different parts of the ſame ground, though not often near one another. The metal in its courſe takes various directions, introducing itſelf into thoſe places where it finds the leaſt reſiſtance; and as theſe parts are more or leſs capacious, the magnitude of the papa is greater or ſmaller.

XIII. About ninety leagues north of the city of Plata, but only forty from Paz, lies the province of Ciacica. Its capital, which has the ſame name, and all the places ſituated to the ſouthward of it, belong to the archbiſhopric of Plata; but many of thoſe to the northwards of it are in the dioceſs of Paz. The countries in this juriſdiction extend in ſome parts above a hundred leagues, and conſequently, the temperature is various. Some ſpots are very hot, and produce an exuberance of coca, which ſhrub alone is the ſource of a very conſiderable commerce, ſupplying all the mine towns from Charcas to Potoſi. The leaves of this plant are packed in frails, each of which muſt, according to the ordinance, contain eight pounds; and its current price at Oruro, Potoſi, and the other mine towns, is from nine to ten pieces of eight, and ſometimes more. The colder parts feed large herds of cattle; together with Vicunas, Guanacos, and other wild creatures. This province has alſo ſome ſilver mines, but not ſo many, nor ſo rich, as the preceding province.

XIV. Attacama is the weſtern boundary of the audience of Charcas, extending to the ſouth ſea; and the principal town, called alſo Attacama, is no leſs than 120 leagues from Plata. Its juriſdiction is of a conſiderable extent, and a great part of it very fruitful; but intermixed with ſome deſarts particularly towards the ſouth, where it divides the kingdoms of Peru and Chili. On the coaſt in this province there is every year a large fiſhery of Tolo, a ſort of fiſh common in the ſouth ſea, with which a very great trade is carried on with the inland provinces, it being there the chief food during Lent, and the other days of abſtinence.

CHAP. XIV.

Account of the three Dioceſſes of LA PAZ, SANTA CRUZ DE LA SIERRA, *and* TUCUMAN; *and of their reſpective Provinces.*

THE province in which the preſent city of la Paz is ſituated, was formerly known by the name of Chuquiyapu, which in the idiom of that country is commonly thought to ſignify Chacra, or an inheritance of gold, and is there corruptly called Chuquiabo. Accordingly Garcelaſo pretends that Chuquiapu ſignifies Lanza Capitana, or principal lance; but this is deriving it from the general language of the Yncas, and with a difference in the penultima, it not being uncommon for a word nearly alike in ſound to have a very different ſignification in each idiom. This province was firſt conquered by Mayta-Capac, the fourth Ynca; and the Spaniards having afterwards taken poſſeſſion of it, and quelled all diſturbances, this city was founded by Pedro de la Gaſca, that in the vaſt diſtance of an hundred and ſeventy leagues between Arequipa and Plata, there might be a ſettlement of Spaniards, for the improvement of commerce, and the ſafety and conveniency of the traders. The preſident Gaſca, committed the care of building it to Alonzo de Mendoza, with orders that it ſhould be erected on a ſpot, midway between Cuſco and Charcas, which are one hundred and ſixty leagues from each other; and that it ſhould be called Nueſtra Senora de la Paz, in memory of the public tranquility recently ſettled by the defeat and execution of Gonzalo Pizarro, and his adherents. With regard to its ſituation, a valley in the country called las Pacaſas, was pitched upon, on the 8th of October, 1548, as a place abounding in grain, and cattle, and full of Indians.

Along the valley de la Paz, flows a pretty large river, but ſometimes greatly increaſed by torrents for the cordillera, about twelve leagues diſtant from the city; but from its vicinity, great part of the country is expoſed to ſo cold an air, as hard froſts, ſnow, and hail are not uncommon; but the city itſelf is ſecured from them by its happy ſituation. Other parts are alſo ſo well ſheltered, that they produce all the vegetables of a hot climate, as ſugar canes, coca, maize, and the like. In the mountainous parts are large woods of valuable timber, but infeſted with bears, tigers, and leopards; they have alſo a few deer: While on the heaths are found Guanacos, Vicunas, and Llamas, with great numbers of cattle of the European ſpecies, as will be ſeen in the account of each reſpective province.

The city is of a middling ſize, and from its ſituation among the breaches of the cordillera, the ground of which it ſtands is not only unequal, but alſo ſurrounded by mountains, without any other proſpect than the channel of the river, and the adjacent mountains. When its river is increaſed either by rains, or the melting of the ſnow on the mountain, its current forces along huge maſſes of rocks, with ſome grains of gold, which are found after the flood has ſubſided. Hence ſome idea may be formed of the riches incloſed in the bowels of theſe mountains; but a more remarkable demonſtration appeared in the year 1730, when an Indian happening to waſh his feet in the river, diſcovered a lump of gold, of ſo large a ſize that the marquis de Caſtel-Fuerte, gave twelve thouſand pieces of eight for it, and ſent it to Spain, as a preſent worthy the curioſity of his ſovereign.

This city is governed by a corregidor, under whom are regidores, and ordinary alcaldes, as in all other towns. Beſides the cathedral, and the pariſh church del Sagrario, where two prieſts officiate, here are alſo thoſe of St. Barbara, St. Sebaſtian, and St. Peter: The religious fraternities of Franciſcans, Dominicans, Auguſtines, the fathers of mercy, a college of Jeſuits, and a convent and hoſpital of St. Juan de Dios; together with a nunnery of the order of the Conception, and another of Santa Tereſa. Here is alſo a college of St. Jerom, for the education of youth, whether deſigned for eccleſiaſtic or civil employments.

In 1608 the church de la Paz was ſeparated from the dioceſs of Chuquiſaca, to which it before belonged, and erected into a cathedral. Its chapter, beſides the biſhop, conſiſts of a dean, archdeacon, chantor, four canons and prebendaries; but with regard to other circumſtances, being the ſame with ſeveral cities already deſcribed, I ſhall proceed to the provinces in its dioceſs.

I. Biſhopric of the audience of charcas.

La Paz.

The provinces or juriſdictions in the dioceſs of Paz, are the ſix following.

I. La Paz. IV. Laricaxas.
II. Omaſuyos. V. Chucuito.
III. Pacages. VI. Paucar-Colla.

I. The juriſdiction of la Paz, is of no great extent, and the city almoſt the only place worth notice in it. In the adjacent cordillera is a mountain of remarkable height, called Illimani, which doubtleſs contains immenſe riches. A crag of it being ſome years ſince ſtruck from it by a flaſh of lightning, and falling on a neighbouring mountain, ſuch a quantity of gold was found in the fragments, that for ſome time that metal was ſold at Paz, at eight pieces of eight per ounce. But its ſummit being perpetually covered with ice and ſnow, no mine has been opened in this mountain. The ſame we have already obſerved of thoſe high mountains in the province of Quito, Vol. I. all attempts having been rendered abortive.

II. North-west, and almoſt at the gates of Paz, the juriſdiction of Omaſuyos begins, and extends about 20 leagues, being bounded on the weſt by the famous lake of Titi-caca, or Chucuito, of which a farther account will be given in the ſequel. The air here is ſomewhat cold, ſo that it produces little grain; but that deficiency is abundantly compenſated by the great numbers of cattle; beſides an advantageous trade for fiſh, carried on in other provinces by the Indians living on the borders of the lake, who are very induſtrious in improving that advantage.

III. Almost ſouth-weſt of Paz, is the juriſdiction of Pacajes, the greateſt part of which being in a cold climate, produces little grain or fruits; ſo that the inhabitants apply themſelves to the breeding of cattle. This province is however very rich in ſilver mines, though but a ſmall part of them are worked; and it is known from, undoubted ſigns, that theſe mines were worked in the time of the Yncas. Here are alſo mines of talc, called jaſpas blancos de Verenguela. It is of a beautiful white, and, on account of its tranſparency is tranſported to different parts of Peru, for making panes of windows, both in churches and houſes; as the ſtone called Tecali ſerves for the ſame uſes in New Spain. In theſe mountains are alſo a great number of mines of gems, particularly one of emeralds, well known in Europe, but for ſome latent reaſons not worked; together with quarries of different ſpecies of marble. In this province is the famous ſilver mine called Verenguela; and likewiſe the mountains of Santa Juana, Tampaya, and others, well known for the immenſe treaſures extracted from them.

IV. Adjacent to the territories of the juriſdiction of la Paz, and to the north of that city is the province of Laricaxas, which extends 118 leagues from eaſt to weſt, and about thirty from north to ſouth. The temperature of the air is different in different parts, and ſome of its products are the ſame with thoſe of Carabaya, by which it is terminated to the northward. This whole province abounds in gold mines, whoſe metal is of ſo fine a quality, that its ſtandard is twenty-three caracts, and three grains. In this province is the celebrated mountain of Sunchuli, in which, about fifty years ſince was diſcovered, a gold mine remarkably rich, and of the ſtandard above-mentioned; but when in its higheſt proſperity, it was unfortunately overflowed; and notwithſtanding prodigious ſums were expended in endeavours to drain it, all the labour and expence, from the works being injudiciouſly conducted, were thrown away.

V. The juriſdiction of Chucuito begins about twenty leagues weſt of Paz, and ſome part of it bordering on the lake of Titi-caca, that collection of waters is alſo called the lake of Chucuito. The extent of this province from north to ſouth is betwixt twenty-ſix and twenty-eight leagues. Its temperature is in general cold and very diſagreeable, the froſts continuing one half of the year, and the other either ſnow or hail is continually falling. Accordingly the only eſculent productions of the vegetable kingdom are the Papas and Quinoas. The inhabitants have however a very beneficial trade with their cattle, which abound in this juriſdicton, by ſalting and drying the fleſh. The traders who carry it to the coaſt exchange it for brandy and wine; and thoſe who go to Cochabamba, carry alſo Papas, and Quinoas, which they barter for meal.

All the mountains in this province have their ſilver mines, and formerly produced largely, but at preſent are totally abandoned.

The territories of the province of Chucuito, are on one ſide bounded by the lake of Titi-caca, the magnitude of which merits ſome account to be given of it. This lake lies between theſe provinces, comprehended under the general name of Calloa, and is of all the known lakes of America, much the largeſt. Its figure is ſomewhat oval, inclining nearly from N. W. to S. E. its circumference is about 80 leagues, and the water, in ſome parts 70 or 80 fathoms deep. Ten or twelve large rivers, beſides a great number of ſmaller ſtreams empty themſelves into it. The water of this lake, though neither bitter or brackiſh, is turbid, and has in its taſte ſomething ſo nauſeous that it cannot be drank. It abounds with fiſh, of two oppoſite kinds; one large and palatable, which the Indians call Suchis; the other ſmall, inſipid and bony, termed long ſince by the Spaniards Boyas. It has alſo great number of geeſe and other wild fowl, and the ſhores covered with flags and ruſhes, the materials of which the bridges are made, and of which an account will be given in the ſequel.

As the weſtern borders of this lake are called Chucuito, ſo thoſe on the E. ſide are diſtinguiſhed by the name of Omaſcuyo. It contains ſeveral iſlands, among which is one very large, and was anciently one mountain, but ſince levelled by order of the Yncas; it, however, gave to the lake its own name of Titicaca, which, in the Indian language, ſignifies a mountain of lead. In this iſland the firſt Ynca Mancho-Capac, the illuſtrious founder of the empire of Peru, invented his political fable, that the ſun, his father, had placed him, together with his ſiſter and conſort Mama Oello Huaco, there, enjoining them to draw the neighbouring people from the ignorance, rudeneſs, and barbarity in which they lived, and humanize them by cuſtoms, laws, and religious rights dictated by himſelf; and in return for the benefits reſulting from this artful ſtratagem, the iſland has, by all the Indians, been conſidered as ſacred; and the Yncas determining to erect on it a temple to the ſun, cauſed it to be levelled, that the ſituation might be more delightful and commodious.

This was one of the moſt ſplendid temples in the whole empire. Beſides the plates of gold and ſilver with which its walls was magnificently adorned, it contained an immenſe collection of riches, all the inhabitants of provinces which depended on the empire, being under an indiſpenſible obligation of viſiting it once a year, and offering ſome gift. Accordingly they always brought in proportion to their zeal or ability, gold, ſilver, or jewels. This immenſe maſs of riches, the Indians, on ſeeing the rapacious violence of the Spaniards, are thought to have thrown into the lake; as it is certainly known, they did with regard to a great part of thoſe at Cuſco, among which was the famous golden chain made by order of the Ynca Huayna Capac, to celebrate the feſtival of giving name to his eldeſt ſon. But theſe valuable effects were thrown into another lake, ſix leagues S. of Cuſco, in the val-

ley

ley of Orcos: and though numbers of Spaniards animated with the flattering hopes of ſuch immenſe treaſures made frequent attempts to recover them, the great depth of the water, and the bottom being covered with ſlime and mud, rendered all their endeavours abortive. For notwithſtanding the circuit is not above half a league, yet the depth of water is in moſt places not leſs than twenty-three or twenty-four fathoms.

Towards the S. part of the lake Titi-caca, the banks approach each other, ſo as to form a kind of bay, which terminates in a river called el Deſaguadero, or the drain, and afterwards forms the lake of Paria, which has no viſible outlet; but the many whirlpools ſufficiently indicate that the water iſſues by a ſubterraneous paſſage. Over the river Deſaguadero is ſtill remaining the bridge of ruſhes, invented by Capac Yupanqui, the fifth Ynca, for tranſporting his army to the other ſide, in order to conquer the provinces of Collaſuyo. The Deſaguadero is here between eighty and a hundred yards in breadth, flowing with a very impetuous current under a ſmooth, and, as it were, a ſleeping ſurface. The Ynca to overcome this difficulty, ordered four very large cables to be made of a kind of graſs which covers the lofty heaths and mountains of that country, and called by the Indians Ichu; and theſe cables were the foundation of the whole ſtructure. Two of theſe being laid acroſs the water, faſcines of dry juncia and totora, ſpecies of ruſhes, were faſtened together, and laid a-croſs them. On theſe the two other cables were laid, and again covered with other faſcines ſecurely faſtened, but ſmaller than the firſt, and arranged in ſuch a manner as to form a level ſurface; and by this means he procured a ſafe paſſage to his army. This bridge, which is about five yards in breadth, and one and a half above the ſurface of the water, is carefully repaired, or rebuilt every ſix months, by the neighbouring provinces, in purſuance of a law made by that Ynca, and ſince often confirmed by the kings of Spain, on account of its prodigious uſe; it being the channel of intercourſe between thoſe provinces ſeparated by the Deſaguadero.

VI. THE laſt juriſdiction of this biſhoprick is that of Paucar-Colla, whoſe capital is the town of Puno. Its juriſdiction ſouthward borders on that of Chucuito, and has the ſame temperature: conſequently is obliged to have recourſe to other provinces for the greateſt part of its grain, and eſculent vegetables; but abounds in all kinds of cattle, both of the European and American kinds. The Indians of the town weave bags with their wool, and ſell them to great advantage. The mountains in this province contain ſeveral ſilver mines, and among the reſt the famous Laycacota, which formerly belonged to Joſeph Salcedo, and where the metal was often cut out of the mine with a chiſſel; but its prodigious richneſs accelerated the death of its owner, ſoon after which the waters broke into it; nor has any labour and expence been able to drain it, ſo that it is at preſent abandoned. Few of the reſt are worked, the general caſe with almoſt all the ſilver mines in this audience, eſpecially of thoſe in the archbiſhopric of Charcas, and this dioceſs of La Paz.

II. Biſhopric in the audience of Charcas.

Santa Cruz de la Sierra.

The province of Santa Cruz de la Sierra, is a government and captain generalſhip: and though its juriſdiction is of a large extent, not many Spaniards are found in it, and the few towns are in general miſſions, comprehended under the common name of Paraguay miſſions. The capital of the ſame name was erected into a biſhopric in the year 1605. Its chapter conſiſts only of a biſhop, dean, and archdeacon, having neither canons, prebendaries, or other dignitaries. The uſual reſidence of the biſhop is the city of Miſque Pocona, eighty leagues from Santa Cruz de la Sierra.

The juriſdiction of Maſque-Pocona, reaches above thirty leagues; and though the city itſelf is very thinly inhabited, there are, in other parts of it, ſeveral populous towns. The temperature is hot, but not in a degree too great for vineyards. The valley in which the city ſtands is above eight leagues in circumference, and produces all kinds of grain and fruits; and the woods and uncultivated mountains afford great quantities of honey and wax, which conſtitute a principal branch of its commerce.

The miſſions belonging to the Jeſuits in the parts dependent on this biſhopric, are thoſe called Indios Chiquitos, or little Indians, a name given them by the Spaniards, on account of the extreme ſmallneſs of the doors of their houſes. Their country lies between Santa Cruz de la Sierra, and the lake Xarayes, from whence the river Paraguay has its riſe, and being increaſed by the conflux of others, forms the famous river de la Plata. It was about the cloſe of the laſt century, when the fathers firſt began their preaching in this nation, and ſo great has been their ſucceſs, that in the year 1732, they had formed ſeven towns, each conſiſting of above 600 families; and were then building others for aſſembling under the ſame laws, the great number of Indians, daily converted. Theſe Indios Chiquitos are well made and active; and their courage has been often experienced by the Portugueſe, who uſed to make incurſions, in order to carry off the inhabitants for ſlaves: but the valour of theſe people has taught them to deſiſt from ſuch inhuman attempts, and, for their own ſafety, to keep within their limits. The arms of theſe Indians are muſquets, ſabres, and poiſoned arrows. Though their language is different from that of the other nations of Paraguay, the ſame cuſtoms nearly obtain here, as among all the other Indians.

Bordering on this nation of Chiquitos is another of Pagan Indians called Chiriguanos, or Chiriguanaes, who have always refuſed to liſten to the miſſionaries; though the fathers ſtill continue to viſit them at certain times, and preach to them, but prudently take care to be accompanied with ſome Chiquitos for their ſecurity; and thus they make now and then a few converts, who are ſent to their towns, and there lead a ſocial life. This generally happens after ſome misfortune in the wars continually carried on between them and the Chiquitos; when in order the more eaſily to obtain a peace, and that the Chiquitos may not abſolutely exterminate them, they ſend for miſſionaries; but ſoon diſmiſs them again, pretending that they cannot bear to ſee puniſhments inflicted on perſons merely for deviating from the rules of reaſon. This plainly demonſtrates, that all they deſire or aim at, is an unbounded licentiouſneſs of manners.

Santa Cruz de la Sierra, the capital of this government, lies eighty or ninety leagues E. of Plata. It was originally built ſomething farther toward the S. E. near the Cordillera of the Chiriguanos. It was founded in the year 1548, by captain Nuflo de Chaves, who called it Santa Cruz, from a town of that name near Truxillo in Spain, where he was born. But the city having been deſtroyed, it was rebuilt in the place where it now ſtands. It is neither large nor well built, nor has it any thing anſwerable to the promiſing title of city.

III. Biſhopric of the Audience of Charcas.

El Tucuman.

Tucma, by the Spaniards called Tucuman, lies in the center of this part of America, beginning S. of the Plata, beyond the towns of Chicas, which furniſh Indians for the mines in Potoſi. On the E. it borders on Paraguay and Buenos Ayres; reaches weſtward to the kingdom of Chili, and ſouthward to the Pampas or plains belonging to the land of Magellan. This country, though united to the empire of the

Yncas, was never conquered by them; having, when Vira Cocha the eighth Ynca had made himſelf ſovereign in Charcas, ſent a deputation of their chiefs, with a requeſt of being admitted among the number of his ſubjects, and that he would be pleaſed to ſend them governors, that their country might partake of the benefits of thoſe wiſe laws, and uſeful improvements he had introduced into all the parts of his empire.

The Spaniards having penetrated into Peru, and finiſhed the conqueſt of far the greateſt part of that empire, proceeded to that of Tucuman in 1549, under the conduct of Juan Nunez de Prado, whom the preſident Pedro de la Gaſca intruſted with the conduct of this expedition. He had, indeed, no opportunity of diſplaying his military talents; for the inhabitants being of a mild and eaſy diſpoſition, readily ſubmitted; on which the following four cities were built in that country, namely, Santiago del Eſtero, ſo called from a river of the ſame name on which it is built, and whoſe inundations greatly contribute to increaſe the fertility of the ſoil; it ſtands above a hundred and ſixty leagues S. of Plata: San Miguel del Tucuman, twenty five or thirty leagues W. of the former; Nueſtra Sennora de Talavera, ſomething more than forty leagues N. W. of Santiago. The fourth was called Cordova de la Nueva Andalucia, and is above eighty leagues S. of Antiago.

The territories of this government being of ſuch extent that they reach from N. to S. above two hundred leagues, and little ſhort of a hundred in ſome parts from E. to W. it was judged proper to increaſe the number of Spaniſh ſettlements; and accordingly orders were given for building two other cities, which are Rioja, about eighty leagues S. W. of Santiago, and Santa, between ſixty and ſeventy leagues N. W. of the ſame city; together with a village called San Salvador, or Xuxui, about twenty leagues N. of Salta.

But all theſe places are ſmall, and built without either order or ſymmetry. The governor, notwithſtanding Santiago was the firſt, reſides at Salta; and even the biſhop with his chapter at Cordova, which is the largeſt. The others have their reſpective Corregidors, under whom alſo are the Indian villages within the dependencies of their proper cities. But of theſe there is no great number, the principal part of the country not being inhabitable, either from a want of water, or from their being covered with impenetrable foreſts. This want of inhabitants is alſo greatly owing to the cruelties and ravages of the ſavage Indians, in their frequent incurſions.

The epiſcopal church of Tucuman, which, as we have already obſerved, is in Cordova, was in the year 1570 erected into a cathedral, and its chapter now conſiſts of the biſhop, dean, archdeacon, chantor, rector and treaſurer, who is elected; but has neither canons nor prebendaries.

Those parts of the country which are watered by the rivers, are ſo remarkably fertile in grain and fruits, that they produce ſufficient for the common conſumption of the inhabitants. The woods abound in wild honey and wax, whilſt the hot parts produce ſugar and cotton; the laſt is manufactured here, and with the woollen ſtuffs alſo wove by the inhabitants, form an advantageous branch of trade. But its great article conſiſts in the mules bred in the luxuriant paſtures of its valleys. Inconceivable droves of theſe creatures are ſent to all parts of Peru, the Tucuman mules being famous over theſe countries, far exceeding all others in ſtrength and docility.

CHAP. XV.

Account of PARAGUAY *and* BUENOS AYRES; *the two laſt Governments of the Audience of* CHARCAS.

IV. Biſhopric of the Audience of CHARCAS.

PARAGUAY.

THE government of Paraguay lies S. of Santa Cruz de la Sierra, and E. of Tucuman. Southward it joins to that of Buenos Ayres; and is terminated eaſtward by the captainſhip of St. Vicente in Brazil, whoſe capital is the city of St. Pablo. Theſe countries were firſt diſcovered by Sebaſtian Gaboto, who, coming to the river of Plata in the year 1526, ſail'd up the river Palana in ſome ſmall barks, and thence entered that of Paraguay. He was ſucceeded in 1536 by Juan de Ayolas, to whom Don Pedro de Mendoza, the firſt governor of Buenos Ayres, had given a commiſſion, together with a body of troops, military ſtores and other neceſſaries; and afterwards, by his orders, Juan de Salinas, founded the city of Nueſtra Senora de la Aſſumption, the capital of the province; but the diſcovery of the whole, and conſequently the conqueſt of people who inhabited it, being ſtill imperfect, it was proſecuted by Alvar Nunez, ſurnamed Cabeza de Baca, or Cowhead, whoſe eminent ſervices, on the Death of Don Pedro de Mendozo, procured him the government of Buenos Ayres.

THE only ſettlement in the whole extent of this government, are the city of Aſſumption, Villa Rica, and ſome other towns, whoſe inhabitants are a mixture of Spaniards, Meſtizos, and ſome Indians, but the greateſt part of the ſeveral caſts. As the city itſelf is but ſmall and irregular, nothing better can be expected in Villa Rica, and other towns and villages. Its houſes are indeed intermixed with gardens and plantations, but without any ſymmetry. It is the reſidence of the governor of the province, who had formerly under his juriſdiction, part of the towns compoſing the miſſions of Paraguay; but a few years ſince they were ſeparated from it, and are now annexed to the government of Buenos Ayres; but without any change in the eccleſiaſtical government. In the city of Aſſumption is a cathedral, whoſe chapter conſiſts of the biſhop, dean, archdeacon, treaſurer, and two canons. The pariſhes of the city of Villa Rica, and of the other towns depending on this government are ſerved by the Franciſcans: but in the miſſionary towns they are ſolely under the care of the Jeſuits; and theſe compoſing the greater number of towns in this province, I ſhall ſpeak particularly of them, ſtill keeping to that conciſeneſs I have obſerved in the other juriſdictions.

THE miſſions of Paraguay, beſides thoſe in the province of that name, include alſo a great many of Santa Cruz de la Sierra, Tucuman and Buenos Ayres. Within a century and a half, the epocha of their firſt eſtabliſhment, they have been the means of bringing into the boſom of the church, many Indian nations, who lived in the blindneſs of idolatry, and the turpitude of the ſavage cuſtoms tranſmitted to them by their anceſtors. The firſt inſtance of this apoſtolic zeal was the ſpiritual conqueſt of the Guacanies Indians, ſome of whom inhabited the banks of the rivers Uruguay and Parana; and others near an hundred leagues up the countries N. W. of the Guayra. The Portugueſe, then only intent on the improvements of their colonies, in violation of the moſt ſacred laws, did not even after the converſion of theſe people, ceaſe from making incurſions, in order to carry off the young inhabitants as ſlaves for their plantations; ſo that it became abſolutely neceſſary, in order to preſerve theſe converts, to remove into Paraguay, about 12000 of all ages, and both ſexes; a like number of emigrants was alſo brought from Tappe, and formed into communities, living here in peace and ſafety; and at the ſame time in a decency becoming their new profeſſion.

But the number of ſucceeding converts was ſo great, that continual additions were neceſſary to theſe towns, ſo that I was at Quito informed by a perſon of undoubted veracity, and thoroughly acquainted with ſuch matters, that the number of towns of the Guaranies Indians in the year 1734, amounted to thirty-two, and ſuppoſed to contain between thirty and forty thouſand families: That from the increaſing proſperity of the Chriſtian religion, they were then deliberating on the manner of building three other towns, theſe thirty-two being in the dioceſſes of Buenos Ayres, and Paraguay. Beſides the Indios Chiquitos belonging to the dioceſs of Santa Cruz de la Sierra, there were at that time ſeven very populous towns; and by reaſon of the great reſort of converted Indians, preparations were making for building others.

The Paraguay miſſions are on all ſides terminated by nations of idolatrous Indians; ſome of which however live in perfect harmony with them, but others do all in their power to exterminate them by frequent incurſions; and it is with the latter that the fathers chiefly employ their zeal, in order to reclaim them from their inhumanity, by preaching to them the glad tidings of the goſpel. Nor is this fortitude deſtitute of fruit, the moſt rational receiving with joy the knowledge of the true God, and quitting their country, are conducted to the Chriſtian towns, where, after proper inſtructions, they are admitted to baptiſm.

About a hundred leagues from the miſſion is a nation of idolaters called Guanoas. It is with great difficulty any of theſe are brought to embrace the light of the goſpel, as they are extremely addicted to a licentious life; and a great number of Meſtizos, and even ſome Spaniards, whoſe crimes have obliged to take ſhelter among them, by their ill example harden the Indians in their contempt of inſtruction. Beſides they are ſo indolent and ſlothful, that they will not take the pains to cultivate the lands, chuſing to live by the more expeditious way of hunting; and being convinced, that if they embrace the Chriſtian religion, and ſubmit to the miſſionaries, they muſt labour, they cannot bear to think of a change which will inevitably deprive them of their favourite indolence. Many, however, of thoſe who come to the Chriſtian towns to viſit their relations, cannot withſtand the order and decency in which they ſee them live, and accordingly embrace the Chriſtian religion.

It is nearly the ſame with the Charuas, a people inhabiting the country between the rivers Parana and Uruguay. Thoſe dwelling on the banks of the river Parana, from the town of Corpus upwards, and called Guananas, are more tractable, and their induſtry in agriculture and other rural arts, render them more ſuſceptible of liſtening to the preaching of the miſſionaries; beſides no ſuch thing as a fugitive is to be found among them. Near Cordova is another nation of idolaters, called Pampas, who, notwithſtanding they frequently come to the city, to ſell different productions of the earth, are very obſtinate in their opinions, and, conſequently, are not reclaimed without the greateſt difficulty. Theſe four nations of idolatrous Indians live, however, in peace with the Chriſtians.

In the neighbourhood of the city of Santa Fé, ſituated in the province of Buenos Ayres, are others who abſolutely reject all terms of peace; ſo that even the villages and eſtates near Santiago and Salta in the government of Tucuman have felt the effects of their daring incurſions. The other nations between theſe and the Chiquitos, and the lake of Xarayes, are little known. Not many years ſince ſome Jeſuit miſſionaries ventured to viſit their country up the river Pilcomayo, which runs from Potoſi to Aſſumption; but their territories being very large, and living a vagrant ſort of lives, without fixed habitations, the zeal of the good fathers was fruſtrated; as it has indeed on many other occaſions, even after repeated trials.

The idolatrous Indians, who inhabit the country from the city of Aſſumption northward, are but very few. The miſſionaries have been ſo fortunate to meet with ſome of theſe in their journies after them, and prevailed on them to accompany them to the Chriſtian towns, where, without much reluctancy, they have embraced Chriſtianity. The Chiriguanos, already mentioned, alſo reſide in theſe parts; but are ſo infatuated with the pleaſures of a ſavage life, that they will not hear of living under laws.

From what has been ſaid, it will eaſily be conceived that the country occupied by the Paraguay miſſions, muſt be of a very great extent. The air in general is moiſt and temperate; though in ſome parts, it is rather cold †. The temperate parts abound with all kinds of proviſions. Cotton contributes conſiderably to their riches, growing here in ſuch quantities, that every little village gathers of it annually above two thouſand arobas; and the induſtrious are very ingenious in weaving it into ſtuffs for exportation. A great deal of tobacco is alſo planted here. But theſe articles are far leſs advantageous to the inhabitants than the herb called Paraguay, which alone would be ſufficient to form a flouriſhing commerce in this province,

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† White froſts are very common here in July and Auguſt, ſometimes they have ice about the thickneſs of half a crown. The former phœnomenon has been ſeen as far to the northward as Rio de Janeiro. A.

vince, it being the only one which produces it; and from hence it is ſent all over Peru, and Chili, where its uſe is univerſal; eſpecially that kind of it called Camini, which is the pure leaf; the other, diſtinguiſhed by the name of Palos, being leſs fine, and not ſo proper for making mate, is not ſo valuable.

These goods are carried, for ſale, to the cities of Santa Fé, and Buenos Ayres, where the fathers have factors; the Indians, particularly the Guaranies, wanting the ſagacity and addreſs, ſo abſolutely neceſſary to procure ſucceſs in commercial affairs. Theſe factors diſpoſe of what is conſigned to them from Paraguay, and lay out the money in ſuch European goods as the towns are then in want of, in ornaments for the churches, and the decent ſupport of the prieſts officiating in them. But the greateſt care is taken in deducting from what each town ſends, the amount of the tribute of its Indian inhabitants, which is remitted immediately to the revenue offices, without the leaſt deduction, except the ſtipends for the prieſts, and the penſions allowed the Caciques.

The other products of their lands, together with their cattle, are made uſe of for the ſubſiſtance of the inhabitants, among whom they are diſtributed with ſuch regularity and œconomy, that the excellent police under which thoſe people live ſo happily cannot be paſſed over in ſilence, without great injuſtice to theſe wiſe legiſlators.

Every town of the miſſions of Paraguay, like the cities, and great towns of the Spaniards, are under a governor, regidores and alcaldes. That the important office of governor may be always filled by a perſon duly qualified, he is choſen by the Indians, with the approbation of the prieſts. The alcaldes are annually appointed by the regidores, and jointly with them, the governor attends to the maintenance of good order and tranquility among the inhabitants; and that theſe officers, who are ſeldom perſons of the moſt ſhining parts, may not abuſe their authority, and either thro' intereſt, or paſſion, carry their revenge too far againſt other Indians, they are not to proceed to puniſhment without previouſly acquainting the prieſt with the affair, that he may compare the offence with the ſentence. The prieſt, on finding the perſon really guilty, delivers him up to be puniſhed, which generally conſiſts in impriſonment for a certain number of days, and ſometimes faſting is added to it; but if the fault be very great, the delinquent is whipt, which is the moſt ſevere puniſhment uſed among them; theſe people being never known to commit any crime that merits a greater degree of chaſtiſement; for immediately on being regiſtered as converts, the greateſt care has been taken in theſe miſſions, to imprint on the minds of theſe new Chriſtians, a deteſtation of murther, robbery, and ſuch atrocious crimes. The execution of the ſentence is preceeded by a diſcourſe made by the prieſt before the delinquent, in which he repreſents to the offender, with the greateſt ſoftneſs and ſympathy, the nature of his crime, and its turpitude; ſo that he is brought to acknowledge the juſtneſs of the ſentence, and to receive it rather as a brotherly correction, than a puniſhment; ſo that tho' nature muſt feel, yet he receives the correction with the greateſt humility and reſignation, being conſcious that he has brought it upon himſelf. Thus the prieſts are in no danger of any malice being harboured againſt them; indeed the love and veneration the Indians pay them is ſo great, that could they be guilty of enjoining an unjuſt puniſhment, the ſuffering party would impute it to his own demerits, being firmly perſuaded that the prieſts never do any thing without a ſufficient reaſon.

Every town has a particular armory, in which are kept all the fire-arms, ſwords, and weapons uſed by the militia, when they take the field, whether to repel the inſults of the Portugueſe, or any heathen Indians inhabiting on their frontiers. And that they may be dextrous in the management of them, they are exercifed on the evening of every holiday in the market-places of the towns. All perſons capable of bearing arms in every town, are divided into companies, and have their proper officers, who owe this diſtinction to their military qualifications: their uniform is richly laced with gold or ſilver, according to their rank, and embroidered with the device of their towns. In theſe they always appear on holidays, and at the times of exerciſe. The governor, alcaldes, and regidores, have alſo very magnificent habits of ceremony, which they wear on ſolemn occaſions.

No town is without a ſchool for teaching reading, writing, dancing, and muſic: and in whatever they undertake they generally excel, the inclination and genius of every one being carefully conſulted before they are forwarded in any branch of ſcience. Thus many attain a very good knowledge of the Latin tongue. In one of the courts of the houſe belonging to the prieſt of every town, are ſhops or workhouſes for painters, ſculptors, gilders, ſilverſmiths, lockſmiths, carpenters, weavers, watchmakers, and all other mechanic arts and trades. Here every one works for the benefit of the whole town, under the inſpection of the prieſts coadjutors; and boys are there alſo inſtructed in thoſe trades or arts, to which they have the greateſt inclination.

The churches are large, and well built: and, with regard to decorations, not inferior to the richeſt in Peru. Even the houſes of the Indians are built with that ſymmetry and convenience, and ſo compleatly and elegantly furniſhed, as to excel thoſe of the Spaniards in many towns in this part of America. Moſt of them however are only of mud walls, ſome of unburnt bricks, and others of ſtone; but all, in general, covered with tiles. Every thing in theſe towns is on ſuch good footing, that all private houſes make gunpowder, that a ſufficient quantity of it may not be wanting, either on any exigency, or for fireworks on holidays, and other anniverſary rejoicings which are punctually kept. But the moſt ſplendid ceremony is on the acceſſion of the new monarch to the Spaniſh throne, when the governor, alcaldes, regidores, together with all the civil and military officers, appear in new uniforms, and other ornaments, to expreſs the ardent affection they bear their new ſovereign.

Every church has its band of muſic, conſiſting of a great number both of vocal and inſtrumental performers. Divine ſervice is celebrated in them with all the pomp and ſolemnity of cathedrals. The like is obſerved in public proceſſions, eſpecially that on Corpus Chriſti day, at which the governor, alcaldes, and regidores, in their habits of ceremony, and the militia in their uniforms, aſſiſt: the reſt of the people carry flambeaux; ſo that the whole is conducted with an order and reverence ſuitable to the occaſion. Theſe proceſſions are accompanied with fine dancing, but very different from that in the province of Quito, deſcribed in the firſt volume; and the performers wear particular dreſſes, extremely rich, and well adapted to the characters repreſented. In ſhort, a miſſionary town omits no circumſtance either of feſtivity or devotion, practiſed in opulent cities.

Every town has a kind of Beaterio, where women of ill fame are placed; it alſo ſerves for the retreat of married women who have no families, during the abſence of their huſbands. For the ſupport of this houſe, and alſo of orphans and others, who by age or any other circumſtance are diſabled from earning a livelihood, two days in the week are ſet apart; when the inhabitants of every village are obliged to ſow and cultivate a certain piece of ground, called Labor de la Comunidad, the labour of the community; and the ſurplus of the produce is applied to procure furniture and decorations for the church, and to clothe the orphans, the aged, and the diſabled perſons. By this benevolent plan all diſtreſs is precluded, and the inhabitants provided with every neceſſary of life. The royal revenues are punctually paid; and by the union of the inhabitants, the uninterrupted peace they enjoy, and the wiſdom of their policy, which is preſerved inviolable, theſe places, if there are any ſuch on earth, are the habitations of true religion and felicity.

THE jeſuits, who are the prieſts of theſe miſſions, take upon them the ſole care of diſpoſing of the manufactures and products of the Guaranies Indians, deſigned for commerce; theſe people being naturally careleſs and indolent, and doubtleſs without the diligent inſpection and pathetic exhortations of the fathers, would be buried in ſloth and indigence. The caſe is very different in the miſſions of the Chiquitos, who are induſtrious, careful, and frugal; and their genius ſo happily adapted to commmerce, as not to ſtand in need of any factors. The prieſts in the villages of this nation are of no expence to the crown, the Indians themſelves rejoicing in maintaining them; and join in cultivating a plantation filled with all kinds of grain and fruits for the prieſt; the remainder, after this decent ſupport, being applied to purchaſe ornaments for the churches.

THAT the Indians may never be in any want of neceſſaries, it is one part of the miniſter's care to have always in readineſs a ſtock of different kinds of tools, ſtuffs, and other goods; ſo that all who are in want repair to him, bringing by way of exchange wax, of which there are here great quantities, and other products. And this barter is made with the ſtricteſt integrity, that the Indians may have no reaſon to complain of oppreſſion; and that the high character of the prieſts for juſtice and ſanctity may be ſtudiouſly preſerved. The goods received in exchange are by the prieſts ſent to the ſuperior of the miſſions, who is a different perſon from the ſuperior of the Guaranies: and with the produce, a freſh ſtock of goods is laid in. The principal intention of this is, that the Indians may have no occaſion to leave their own country, in order to be furniſhed with neceſſaries; and by this means are kept from the contagion of thoſe vices, which they would naturally contract in their intercourſe with the inhabitants of other countries, where the depravity of human nature is not corrected by ſuch good examples and laws.

If the civil government of theſe towns be ſo admirably calculated for happineſs, the eccleſiaſtical government is ſtill more ſo. Every town and village has its particular prieſt, who in proportion to its largeneſs, has an aſſiſtant or two of the ſame order. Theſe prieſts, together with ſix boys who wait on them, and alſo ſing in the churches, form in every village a kind of ſmall college, where the hours are under the ſame regulation, and the exerciſes ſucceed each other with the ſame formalities as in the great colleges of cities. The moſt laborious part of the duty belonging to the prieſt, is to viſit perſonally the chacaras or plantations of the Indians; and in this they are remarkably ſedulous, in order to prevent the ill conſequences of that ſlothful diſpoſition ſo natural to the Guaranies; who, were they not frequently rouſed and ſtimulated by the preſence of the prieſt, would abandon their work, or, at leaſt, perform it in a very ſuperficial manner. He alſo attends at the public ſlaughter-houſe, where every day are killed ſome of the cattle; large herds of which are kept for the public uſe by the Indians. The fleſh of theſe beaſts are dealt out by the prieſt, in lots proportionable to the number of perſons each family conſiſts of; ſo that every one has a ſufficiency to ſupply the calls of nature, but nothing for waſte. He alſo viſits the ſick, to ſee that they want for nothing, and are attended with that care and tenderneſs their ſtate requires. Theſe charitable employments take up ſo great a part of the day, as often to leave him no time for aſſiſting the father coadjutor in the ſervices of the church. One uſeful part of the duty of the latter is to catechize, and explain ſome portion of ſcripture in the church every day in the week, Thurſdays and Saturdays excepted, for the inſtruction of the young of both ſexes; and theſe in every town are not leſs than two thouſand. On Sundays all the inhabitants never fail to attend divine ſervice. The prieſt alſo viſits the ſick to confeſs them; and, if the caſe requires it, to give them the Viaticum; and to all theſe muſt be added the other indiſpenſible duties of a prieſt.

BY the ſtrictneſs of the law theſe prieſts ſhould be nominated by the governor, as vice-patron, and be qualified for their function by the conſecration of the biſhop; but as among the three perſons recommended on ſuch occaſions to the governor, there will of conſequence be one, whoſe virtues and talents render him moſt fit for the office; and as no better judges of this can be ſuppoſed than the provincials of the order, the governor and biſhop have receded from their undoubted rights, and the provincials always collate and prefer thoſe whoſe merits are moſt conſpicuous.

THE miſſions of the Guaranies are all under one ſuperior, who nominates the aſſiſtant prieſts of the other towns. His reſidence is at Candelaria, which lies in the center of all the miſſions; but he frequently viſits the other towns, in order to ſuperintend their governments; and, at the ſame time, concerts meaſures that ſome of the fathers may be ſent among the heathen Indians, to conciliate their affections, and by degrees work their converſion. In this important office he is aſſiſted by two vice-ſuperiors, one of whom reſides at Parana, and the other on the river Uruguay.

All theſe miſſions, though ſo numerous and diſperſed, are formed as it were into one college, of which the ſuperior may be conſidered as the maſter or head; and every town is like a family governed by a wiſe and affectionate parent, in the perſon of the prieſt.

In the miſſions of the Guaranies, the king pays the ſtipends of the prieſts, which, including that of the aſſiſtant, is three hundred dollars per annum. This ſum is lodged in the hands of the ſuperior, who every month ſupplies them with neceſſary food and apparel, and on any extraordinary demand, they apply to him, from whom they are ſure of meeting with a gracious reception.

The miſſions of the Chiquito Indians have a diſtinct ſuperior; but with the ſame functions as he who preſides over the Guaranies; and the prieſts alſo are on the ſame footing, but have leſs anxiety and labour; the induſtry and activity of theſe Indians, ſaving them the trouble of coming among them to exhort them to follow their employments, or of being the ſtorekeepers and agents in diſpoſing of the fruits of their labours; they themſelves vending them for their own advantage.

All theſe Indians are very ſubject to ſeveral contagious diſtempers; as the ſmall-pox, malignant fevers, and others, to which, on account of the dreadful havock attending them, they give the name of peſtilence. And to ſuch diſeaſes it is owing, that theſe ſettlements have not increaſed in a manner proportional to their numbers, the time ſince their eſtabliſhment, and the quietneſs and plenty in which theſe people live.

The miſſionary fathers will not allow any of the inhabitants of Peru, whether Spaniards, or others, meſtizos, or even Indians, to come within their miſſions in Paraguay. Not with a view of concealing their tranſactions from the world; or that they are afraid leſt others ſhould ſupplant them of part of the products and manufactures; nor for any of thoſecauſes, which even with leſs foundation, envy has dared to ſuggeſt; but for this reaſon, and a very prudent one it is, that their Indians, who being as it were new born from ſavageneſs and brutality, and initiated into morality and religion, may be kept ſteady in this ſtate of innocence and ſimplicity. Theſe Indians are ſtrangers to ſedition, pride, malice, envy, and other paſſions, which are ſo fatal to ſociety. But were ſtrangers admitted to come among them, their bad examples would teach them what at preſent they are happily ignorant of; but ſhould modeſty, and the attention they pay to the inſtructions of their teachers, be once laid aſide, the ſhining advantages of theſe ſettlements would ſoon come to nothing; and ſuch a number of ſouls, who now worſhip the true God in the beauty of holineſs, and live in tranquility and love (of which ſuch ſlender traces are ſeen among civilized nations) would be again ſeduced into the paths of diſorder and perdition.

These Indians live at preſent in an entire aſſurance, that whatever their prieſts adviſe them to is good, and whatever they reprehend is bad. But their minds would ſoon take a different turn, by ſeeing other people, on whom the doctrine of the goſpel is ſo far from having any effect, that their actions are abſolutely repugnant to its precepts. At preſent they are firmly perſuaded, that in all bargains and other tranſactions, the greateſt candor and probity muſt be uſed, without any prevarication or deceit. But it is too evident, that were others admitted among them, whoſe leading maxim is to ſell as dear, and buy as cheap as they are able, theſe innocent people would ſoon imbibe the ſame practice, together with a variety of others which ſeem naturally to flow from it. The contamination would ſoon ſpread thro' every part of their behaviour, ſo as never more to be reclaimed. I do not here mean to leſſen the characters of thoſe Spaniards or inhabitants of other nations, whoſe countries are ſituated conveniently for trading with Paraguay, by inſinuating that they are univerſally fraudulent and diſſolute: but, on the other hand, among ſuch numbers, it would be very ſtrange if there were not ſome; and one ſingle perſon of ſuch a character would be ſufficient to infect a whole country. And who could pretend to ſay, that, if free admiſſion were allowed to foreigners, there might not come in, among a multitude of virtuous, one of ſuch peſtilent diſpoſitions? Who can ſay that he might not be even the very firſt? Hence it is that the Jeſuits have inflexibly adhered to their maxim of not admitting any foreigners among them: and in this they are certainly juſtified by the melancholy example of the other miſſions of Peru, whoſe decline from their former happineſs and piety is the effect of an open intercourſe.

Though in the ſeveral parts of Paraguay, where the miſſions have been always ſettled, there are no mines of gold and ſilver; ſeveral are to be found in ſome adjacent countries under the dominion of the king of Spain; but the Portugueſe reap the whole benefit of them: for having encroached as far as the lake Xarayes, near which, about twenty years ago, a rich mine of gold was diſcovered; they, without any other right than poſſeſſion, turned it to their own uſe: the miniſtry in Spain, in conſideration of the harmony ſubſiſting between the two nations, and their joint intereſt, forbearing to make uſe of any forcible methods.

V. Biſhopric of the audience of Charcas.

Buenos Ayres.

The eccleſiaſtical juriſdiction of the biſhop of Buenos Ayres extends to all the countries under the temporal government of the ſame name; and this begins on the oriental and ſouthern coaſt of that part of America, and extends weſtward as far as Tucuman; on the N. it terminates on Paraguay, and is bounded towards the S. by the land of Magellan. Its countries are watered by the great river de la Plata, the diſcovery of which was owing to Juan Dias de Solis, who, in 1515, having ſailed from Spain with two veſſels to make diſcoveries, arrived at the mouth of this river, and took poſſeſſion of it in the name of the king of Spain. But being unhappily deluded by the ſigns of joy and friendſhip made by the Indians, he landed, and was immediately killed, together with his few attendants. The ſame voyage was repeated in 1526 under Sebaſtian Gabot, who entering the river, diſcovered an iſland, which he called St. Gabriel; and advancing further, came to another river, which emptied itſelf into that of La Plata; to this he gave the name of St. Salvador, cauſing his fleet to enter the river, and there diſembark their troops. Here he built a fort, and leaving in it part of his men, he ſailed above two hundred leagues up the river Parana, diſcovering alſo that of Paraguay. Gaboto, having purchaſed ſome ingots of ſilver from the Indians he met with, and particularly from the Guaranies, who brought the metal from the other parts of Peru, imagined that they had found it in the neighbourhood of the river, and thence called the river Rio de la Plata, or Silver River, which has ſuperſeded that of Solis, as it was before called from its firſt diſcoverer, whoſe memory is ſtill preſerved by the little river Solis, about ſeven or eight leagues W. of Maldonado-bay.

THE capital of this government is called Neueſtra Senora de Buenos-Ayres. It was founded in the year 1535 by Don Pedro de Mendoza, purſuant to his orders, which alſo appointed him governor. He choſe for it a place called Cape Blanco, on the S. ſide of Rio de la Plata, cloſe by a ſmall river. Its latitude, according to father Feville, is 34°, 34′, 38″, S. He gave it the name of Buenos Ayres, on account of the extreme ſalubrity of the air. The city is built on a large plain, gently riſing from the little river. It is far from being ſmall, having at leaſt three thouſand houſes, inhabited by Spaniards and different caſts. Like moſt towns ſituated on rivers, its breadth is not proportional to its length. The ſtreets are however ſtrait, and of a proper breadth. The principal ſquare is very large, and built near the little river; the front anſwering to it, being a caſtle where the governor conſtantly reſides; and, with the other forts, has a garriſon of a thouſand regular troops. The houſes, formerly of mud walls, thatched with ſtraw and very low, are now much improved, ſome being of chalk, and others of brick, and having one ſtory beſides the ground floor, and moſt of them tiled.* The cathedral is a ſpacious and very elegant ſtructure, and is the pariſh church for the greateſt part of the inhabitants; the other at the farther end of the city being only for the Indians. The chapter is compoſed of the biſhop, dean, arch-deacon, and two canons, one by compoſition, the other by preſentation. Here are alſo ſeveral convents, and a royal chapel in the caſtle where the governor reſides. With regard to the civil and œconomical government, and the magiſtracy, it will be unneceſſary to enter into particulars, they being on the ſame footing as thoſe of the places already mentioned.

The climate here is very little different from that of Spain; and the diſtinctions between the ſeaſons are the ſame. In winter indeed violent tempeſts of winds and rain, are here very frequent, accompanied with ſuch dreadful thunders and lightnings, as fill the inhabitants, though uſed to them, with terror and conſternation. In ſummer the exceſſive heats are mitigated by gentle breezes, which conſtantly begin at eight or nine in the morning.

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* Their houſes are commonly thatched with cocoa nut leaves and flags. A.

The city is ſurrounded by a ſpacious and pleaſant country, free from any obſtruction to the ſight; and from theſe delightful fields, the inhabitants are furniſhed with ſuch a plenty of cattle, that there is no place in America or Europe where meat is better or cheaper. It is the uſual cuſtom to buy the hides of the beaſt, the carcaſe being in ſome meaſure a gratuitous addition; and the meat is always fat and very palatable. The country to the W. S. and N. of Buenos Ayres, lately abounded ſo greatly in cattle and horſes, that the whole coſt conſiſted in taking them; and even then a horſe was ſold for a dollar of that money, and the uſual price of a beaſt, choſen out of a herd of two or three hundred, only four rials. At preſent there is no ſcarcity, but they keep at a greater diſtance, and are more difficult to be catched, by reaſon of the prodigious havock made of them by Spaniards and Portugueſe, merely for the ſake of their hides; the grand commerce of Buenos Ayres.

All kinds of game and fiſh are alſo here in the ſame plenty; ſeveral ſorts of the latter being caught in the river running by it; but the Pexereyes are very remarkable, ſome of them being half a yard or more in length. Both the American and European fruits come to full perfection, and are in great plenty. In a word, for the enjoyments of life, eſpecially with regard to the ſalubrity of the air, a finer country cannot be imagined.

This city is ſituated about ſeventy-ſeven leagues from Cape Santa Maria, which lies on the N. coaſt near the entrance of the river de la Plata; and its little river not having water ſufficient for ſhips of burden to come up to Buenos Ayres, they anchor in one of the two bays on the ſame coaſt. That fartheſt to the eaſtward is called Maldonado, and is nine leagues from the above cape: the other bay, is, from a mountain near it, named Monte-video, and is about twenty leagues from it.

Within the government of Buenos Ayres, are three other cities, namely, Santa Fè, las Corientes, and Monte-video. The laſt which was lately built, ſtands on the border of the bay, from whence it derives its name. Santa Fè, lies about ninety leagues N. W. of Buenos Ayres, between the Rio de la Plata, and the Rio Salado, which after running thro' the country of Tucuman, joins the former. The city is but ſmall, and meanly built; owing in a great meaſure, to the inſults it has frequently ſuffered from the heathen Indians, who not long ſince pillaged it, maſſacreing the inhabitants of the city, and thoſe of the neighbouring villages; and they ſtill keep the country under continual apprehenſions of another viſit. It is however the channel of the commerce between Paraguay and Buenos Ayres, for the herb Camini and Palos. The city de las Corientes, ſituated on the eaſtern banks of the river de la Plata, betwixt it and the river Parana, is about a hundred leagues N. of the city of Santa Fè. Its magnitude and diſpoſition are both inferior to Santa Fè, and indeed has no marks of a city except the name. Each of theſe cities has its particular corregidor, as lieutenant of the governor; and its inhabitants, together with thoſe of the neighbouring country are formed into a militia, which on any appearance of an invaſion from the Indians, aſſemble, and have often ſhewn a great deal of reſolution in repelling the attacks of their Pagan enemies. It has already been obſerved, that part of the towns of the miſſions of Paraguay belong to this dioceſs, and with regard to the royal juriſdiction, theſe miſſions univerſally depend on Buenos Ayres; thoſe which formerly belonged to the government of Paraguay having been ſeparated from it.

Having thus with the government of Buenos Ayres, finiſhed my account of every thing worthy of notice in the audiences of Lima and Charcas; together with the juriſdictions included in their dioceſſes, it now remains only to conclude my deſcription of the kingdom of Peru, with an account of the kingdom and audience of Chili; but the many objects of importance in it ſo well deſerves to be fully treated of, that I thought proper to reſerve them for the following book; thoſe included in this, as I have mentioned in its place, merited a much greater prolixity; for from what has been ſaid in the firſt volume of the province of Quito, ſome idea of the difference between the two with regard to the number of people, towns and villages, trade and commerce, may be conceived; the province of Quito having only one dioceſs and part of another; whereas Lima contains one archbiſhopric, and four biſhoprics; and that of Charcas one biſhopric more than that of Lima. In the province of Quito only a few mines are worked, and thoſe to little advantage; whereas the mines of Lima and Charcas, by their immenſe riches, draw thither great numbers of traders and induſtrious people, and thus ſpread wealth and affluence through the whole country, by the briſk circulation of trade. It muſt however be owned, that the number of people in theſe provinces bear no proportion to their extent; and it is with too much truth ſaid, that they are in many places almoſt deſtitute of people; for ſuppoſing a corregidor to have twenty villages under his juriſdiction; yet if the leaſt extent of it be thirty leagues one way, and fifteen another, they muſt be very thin. For draw a parallelogram of that dimenſion, it will contain 450 ſquare leagues of ground, and conſequently the ſhare to each village will be twenty two ſquare leagues and a half. This calculation is made from the ſmalleſt diſtances, there being juriſdictions of a far greater extent; and others, which, though equal in dimenſions, have not twenty villages. What has been ſaid of the products and manufactures in each juriſdiction muſt be underſtood in a general ſenſe, we not having entered into many particulars made or produced in ſome towns, and not common to others; as may be obſerved in the deſcription of Quito. But theſe accounts drawn from our own experience, and the relations of perſons of undoubted veracity, we hope will not prove unacceptable to the reader, who is deſirous of forming a true idea of theſe parts, which for their riches, fertility, prodigious extent, and many other particulars, merit the greateſt attention; eſpecially for the amazing ſucceſs which has attended the propagation of the chriſtian religion, in countries formerly involved in ignorance and inhumanity.*

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* It is ſuppoſed, that the kings of Spain and Portugal have five times the number of ſubjects in their American ſettlements than in their reſpective kingdoms. Notwithſtanding which you may travel in America 20 leagues together and not ſee a hut, except you are in the neighbourhood of ſome of the great towns: ſo great are the tracts of land poſſeſſed by each prince. A.

BOOK VIII.

Return from LIMA *to* QUITO: *Voyage from* CALLAO *to* GUAYAQUIL, *for putting that City in a Poſture of Defence againſt the Attack apprehended from the* ENGLISH *Squadron, under Commodore* ANSON. *Second Voyage to* LIMA, *and from thence to the Iſland of* JUAN FERNANDES, *and the Coaſt of* CHILI; *with an Account of that Kingdom, and the adjacent Sea, and return to the Port of* CALLAO.

CHAP. I.

Voyage from CALLAO *to* PAITA, *with nautical Remarks.*

THE time of our ſtay at Lima and Callao was taken up in the diligent execution of ſeveral commiſſions with which the Vice-roy had been pleaſed to honour us, for putting the coaſts, and other parts of that kingdom in the beſt poſture of defence; that in caſe an Engliſh ſquadron ſhould make any attack*, ſo a vigorous reſiſtance might diſcourage any farther attempt of that nature. Having made the neceſſary diſpoſitions to the Vice-roy's ſatisfaction, and four men of war which had been ſent at the beginning of the ſummer to cruize off the coaſt of Chili, in order to attack the Engliſh ſquadron at their firſt appearance, being returned without the leaſt information of any foreign ſhips having been ſeen in thoſe ſeas; and the ſeaſon of the year now inclining to winter, when every one was of opinion, that it was utterly impracticable for Mr Anſon and his ſhips to get round Cape Horn that year, if (as indeed we concluded) he had not already performed it; we deſired leave, as our longer ſtay could be of no ſervice, to return to Quito, in order to proſecute the original deſign of our voyage. This leave, we, with ſome difficulty, obtained; by reaſon of the great want of officers in Peru, and the certain advice the Vice-roy received, that the Spaniſh ſquadron, under the command of Don Joſeph Pizarro, had not been able to get round Cape Horn. But at length, convinced that our ſtay would greatly retard the execution of his majeſty's particular commands, and confident that on any ſudden exigency he would find the ſame alacrity in us to obey his orders, he was pleaſed to grant our requeſt, and diſmiſſed us in the moſt polite manner.

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* At this time Spain and England were at war.

There happened at this time to be one of the largeſt merchant ſhips trading in the ſouth ſeas, at Callao, juſt ready to ſail for Guayaquil, called the Chaldas. On board this ſhip we embarked on the 8th of Auguſt 1741, and on the 15th of the ſame month anchored at Paita; continued our voyage from thence on the 18th, and on the 21ſt entered the harbour of Puna. We immediately ſet out for Guayaquil, and from thence continued our journey for Quito, which we reached on the 5th of September.

The courſe generally ſteered from Callao to Paita, is firſt W. N. W. till the ſhips are paſt the Feralones* of the iſland of Guara. From thence N. W. and N. W. one quarter northerly, to a latitude a little beyond the outermoſt iſland of Lobos, or Wolves. Afterwards they ſteer N. and N. E. till they make the continent within them, and which is continued in ſight till they arrive at the Port of Paita; being very careful to keep at a proper diſtance from Ogujia, which is very low, and projecting a great diſtance into the ſea. Accordingly cautious navigators, after paſſing the iſlands of Lobos, ſteer a north courſe till they get ſight of that of Nonura.

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* The Feralones are two old walls on the iſland of Guara, and ſerve as light-houſes.

THE land of this whole coaſt is low; but there are two ſigns which evidently indicate its being near. Firſt the ſea-wolves, which are ſeen near theſe iſlands, and at three or four leagues diſtant from them. The ſecond is the great flocks of birds all along this coaſt, flying two or three leagues from the ſhore, in queſt of food. And though fogs are very frequent here, and ſo thick as to hide the land, yet its diſtance may be nearly known from theſe ſigns in the day time; but at night more circumſpection is neceſſary on account of the extream lowneſs of the ſhore. And tho' the iſlands of Lobos are ſomething higher than the coaſt, too much caution cannot be uſed in approaching them.

IT is common in this voyage if the ſhip is intended to touch at Paita, and has not had ſight of the iſlands of Lobos in the day-time, when in their latitude, to lie to all night. But if they do not propoſe to ſtop at Paita, proper attention muſt be given to the courſe, and the voyage continued. If the ſhip be bound to Paita, there is a neceſſity for making theſe iſlands, or the continent near them to the N. in order to avoid being carried beyond the port by the currents; as in ſuch a caſe a great deal of time would be loſt in getting back, both the wind and currents being contrary.

FROM Paita, the coaſt is always kept in ſight; but a careful look out is neceſſary in order to diſcover the Negrilos, rocky ſhoals, projecting four or five leagues diſtant from the ſhore, and lying betwixt Paita and cape Blanco, one of the points of Guayaquil-bay. The winds during this whole paſſage are uſually S. but in the ſummer, that is, from November to May, ſometimes veer as far as S. E. Near the coaſt is a periodical morning breeze, or faint eaſterly wind, which ſhifts round to the S. E. or S. S. E. and in this ſeaſon, at any diſtance from the coaſt, the S. winds are alſo faint; nor are calms uncommon, tho' they are of ſhort continuance; but the Briſas never reach ſo far: and this renders the voyage from Paita to Callao ſo very long in all ſeaſons. For if a ſhip ſtretches out to a great diſtance from the coaſt, the winds, even within ten or twelve leagues, ſhift from S. to S. W. but if ſhe keeps along the ſhore, and endeavours to perform her voyage by tacking, ſhe loſes on one, what ſhe gained on another. Beſides, during the winter the currents ſet ſtrongly towards the N. or N. W. and conſequently render the voyage ſtill more tedious. In ſummer there is here generally no current, or if any do ſet to the northward, it is ſcarcely perceived; the direction of the current in that ſeaſon being generally W. This proceeds from the Briſas blowing from the N. of the equator, tho' they are unable to change the ſet of the current to the S. as would be the natural conſequence, were it not for the reſiſtance it meets with from the waters agitated by the S. winds to the ſouthward of the equinoctial; but by meeting each other they run towards the W. There are, however, ſome ſhort intervals during the ſummer, when the currents ſuddenly change their direction, and run to the ſouthward, but at no great diſtance from the ſhore; and in the ſame inſtantaneous manner ſhift about to an oppoſite point; and this is the reaſon why moſt ſhips coming from Paita to Callao in this ſeaſon keep near the ſhore, and work up to windward, hoping, by the favourable change of the currents, to acquire that aſſiſtance which the winds deny.

At all times this voyage is of a moſt diſagreeable and fatiguing length; for tho' the diſtance according to the latitude of theſe ports, be only 140 leagues, a ſhip is very fortunate to perform it in forty or fifty days; and even if after ſpending that time in continual labour, ſhe be not obliged to return again to Paita; ſuch accidents being very common; and it is nothing extraordinary to meet with two or three miſfortunes of the ſame kind ſucceſſively, eſpecially if the ſhips make a great deal of lee-way, when it is often a twelvemonth's taſk. They relate here a ſtory to this purpoſe, that the maſter of a merchant ſhip, who had been lately married at Paita, took his wife on board with him, in order to carry her to Callao. In the veſſel ſhe was delivered of a ſon, and before the ſhip reached Callao, the boy could read diſtinctly. For after turning to windward, two or three months, proviſions growing ſhort, the maſter put into ſome port, where ſeveral months were ſpent in procuring a freſh ſupply; and after another courſe of tacking, the ſame ill fortune ſtill purſued him; and thus four or five years were ſpent in tacking and victualling to the ruin of the owner, before the ſhip reached Callao. This misfortune was, in a great meaſure, owing to the ill conſtruction of the ſhip; and every other circumſtance tending to obſtruct her paſſage, the tranſaction has nothing very wonderful in it.

ACCORDING to obſervations made by Don George Juan at Paita, in the year 1737, its latitude is 5° 5′ S. It is a ſmall place, having only one ſtreet, and about 172 houſes; and theſe only of Quinchas and canes covered with leaves; the only houſe built of ſtone being that of the governor. It has a pariſh church and a chapel dedicated to our lady of mercy, and ſerved by a religious of that order. A little to the ſouthward of the town is a mountain, called from its figure Silla de Paita, or the ſaddle of Paita. The ſoil round Paita is wholly of ſand, and extreamly barren; for beſides the total want of rain, it has not a ſingle river for the conveyance of water; ſo that it is entirely deſtitute of that neceſſary fluid, unleſs what is daily brought with great fatigue from Colan, a town on the ſame bay, four leagues N. of Paita, and near which runs the river Chera, the ſame ſtream which waters Amotape. The Indians of the town of Colan are under an obligation of daily ſending to Paita, one or two balzas loaded with water, which is diſtributed among the inhabitants by ſtated proportions. From the ſame town Paita has alſo the greateſt part of its proviſions. The nature of the ſoil, and the ſituation of the place render it extremely hot. Its inhabitants, who are about thirty-five or forty families, and conſiſt of Spaniards, Mulattoes, and Meſtizos, live chiefly by paſſengers going or returning from Panama to Lima. So that the town owes its whole ſupport to the harbour, which, as I have before obſerved, is the place where the cargoes of goods ſent from Panama are landed, together with thoſe coming from Callao to the juriſdictions of Piura and Loja.

In the bay of Paita, and that of Sechura, which lies a little farther to the ſouthern, ſuch large quantities of tollo are taken as to anſwer the demands of the provinces of the mountains, and part of thoſe of Quito and Lima. The ſeaſon for this fiſhery begins in October, when great numbers of barks go from Callao, returning when the ſeaſon is over. Fiſhing is alſo the conſtant employment of the Indians of Colan, Sechura, and the ſmall hamlets near the coaſt; theſe ſeas abounding in ſeveral kinds of fiſh, beſides the tollo, all palatable, and ſome delicious.

CHAP. II.

Account of the Tranſactions at QUITO: *unhappy occaſion of our ſudden return to* GUAYAQUIL.

ON our arrival at Quito, we made it our firſt buſineſs to join the French company, who were pleaſed to expreſs a great deal of joy at our return. Mr. Godin, during our abſence, had finiſhed the aſtronomical obſervation to the northward, and though Meſſrs. Bouguer and de la Condamine, had alſo gone through them, yet they ſtill purpoſed to repeat them; for theſe able academicians, who had always ſhewn an indefatigable zeal for the perfection of the work, were particularly attentive in obſerving the greateſt obliquity of the ecliptic; at which obſervations we alſo aſſiſted; but ſeveral accidents hindered them from being carried on without interruption. They therefore thought it moſt agreeable to their character, and the commiſſion with which they had been honoured, to ſpend ſome more time in aſcertaining this important point, than to leave the country before their obſervations were compleated. Notwithſtanding their ſtay was attended with ſo much inconvenience and fatigue, they could not think of leaving undetermined a difficulty, occaſioned by a certain motion which they obſerved in the ſtars. In order to aſcertain with the greater accuracy the quantity of the arch, they divided themſelves into two companies, Bouguer being at the head of one, and M. de la Condamine accompanied by M. Berguin, at that of the other; the latter, while the geometrical menſuration was carrying on, applied himſelf with indefatigable labour, and admirable ſkill in drawing maps of the country, in order to erect the ſignals in the moſt advantageous places. He alſo aſſiſted both companies in their menſurations of the two baſes, which ſerved to prove the accuracy of the operations. And, laſtly, he was preſent at making the aſtronomical obſervations. But before the repetition was undertaken, M. de la Condamine employed himſelf in erecting two obeliſques at the extremities of the baſe of Yaruqui, as monuments of this tranſaction: This ſpot having been the foundation of the whole work. Various were the ſentiments with regard to the inſcription proper to be engraved on them; and indeed the difficulties attending this particular, ſeemingly of no great importance, were ſuch, as could not be removed till the affair was intirely dropt on account of other things of real concern, and which would admit of no delay. It was however unanimouſly concluded, that the whole affair ſhould be referred to his Majeſty's pleaſure after our arrival in Spain. Accordingly in the year 1746, the marquis de la Enſenada, equally diſtinguiſhed as a ſtateſman, and a patron of real knowledge, being at that time ſecretary of ſtate for the Indies, ſent over, in his Majeſty's name, the following inſcription.

PHILIPPO V.
Hiſpaniarum, & Indiarum Rege Catholico.
LUDOVICI XV.
Regis Chriſtianiſſimi Poſtulatis, Regiæ Scientiarum Academiæ Pariſienſis.
Votis Annuente, ac Favente.
LUDOV. GODIN, PETRUS BOUGUER,
CAR. MARIA DE LA CONDAMINE,
Ejuſdem Academiæ Socii,
Ipſius Chriſtianiſſimi Regis Juſſu, & Munificentia.
Ad Metiendos in Æquinoctiali Plaga
Terreſtres Gradus,
Quo vera Terræ Figura, Certius Innoteſceret,
In Peruviam Miſſi;
Simulque

GEORGIUS JUAN S. JOHANNIS Hieroſolymitani Ord.
Eques, &
ANTONIUS DE ULLOA,
Uterque Navium Bellicarum Vice-præfecti, et Mathematicis Diſciplinis Eruditi.
Catholici Regis Nutu, Auctoritate Impenſa ad ejuſdem menſionis Negotium eodem allegati Communi Labore, Induſtria, Conſenſu in hac Yaruquenſi Planitie diſtantiam Horizontalem 6272 $\frac{551}{726}$ Paris.
Hexapedarum.
In Linea a Borea Occidentem verſus grad. 19 min.
25 $\frac{1}{2}$ intra hujus & alterius
Obeliſci Axes Excurrentem,
Quœque ad Baſim primi Trianguli Latus Eliciendam & Fundamenti Toti Operi jaciendum inſerviret, ſtatuere.
Anno CHRISTI MDCCXXXVI. Menſe NOVEMBRI.
Cujus Rei Memoriam duabus hinc inde Obeliſcorum molibus extructis Alternum conſecrari placuit.

"In the reign of his Catholic Majeſty, Philip V. "King of Spain and the Indies; agreeable to the "requeſt of his moſt Chriſtian Majeſty Lewis XV. "King of France, and in condeſcenſion to the de"ſire of the Royal Academy of Sciences at Paris, "Lewis Godin, Peter Bouguer, Charles Maria de "la Condamine, Members of that Academy, were, "by the command and munificence of the moſt "Chriſtian King, ſent into Peru, to meaſure the "terreſtrial degrees under the equinoctial, in order "to obtain a more accurate knowledge of the true "figure of the earth. At the ſame time, by the "command, and at the expence of his Catholic Ma"jeſty, were ſent, George Juan, Knight of the "order of St. John of Jeruſalem, and Antonio de "Ulloa, both Lieutenants in the Royal navy, and "well acquainted with all the branches of the ma"thematics: during the whole proceſs of this men"ſuration they all equally ſhared in the fatigues,

“ hardſhips, and operations; and with an unani-
“ mous conſent determined in this plain of Yaruqui
“ a horizontal diſtance of $6272\frac{551}{726}$ Paris toiſes in
“ a line whoſe direction was N. 19° 25′ 30″ weſterly,
“ and intercepted between the axes of this and the
“ other obeliſque, as the baſe or ſide of the firſt
“ triangle, and a foundation for the whole work.
“ In the month of November, 1736. In memory of
“ which tranſaction an obeliſque has been erected at
“ each extremity of the ſaid baſe.”

We had now been three months at Quito, waiting till Mr. Hugot, inſtrument-maker to the Company, had finiſhed ſome indiſpenſible works in which he was then employed, that he might accompany us to the place where M. Godin, after finiſhing the obſervations, had left the inſtrument, which required ſome repairs in order for our making uſe of it in finiſhing our part of the work. But on the 5th of December, 1741, when we were animated with the hopes of concluding our taſk in two or three days, the melancholy news arrived at Quito, that Paita had been pillaged and burnt by a ſquadron of men of war, commanded by Commodore Anſon; and was too ſoon confirmed in all its circumſtances, by letters from the Corregidor and other officers of Piura, giving an account that on the 24th of November, at two in the morning, the Centurion man of war, being the Commodore's ſhip, had entered that harbour, and ſent her long-boat a-ſhore with forty armed men, under the advantage of the night, whereby the inhabitants and ſtrangers who happened to be in the place, were waked from their ſleep by the ſhocking ſurprize of an invaſion, the firſt notice of which were given by the cries of a negro; ſo that filled with confuſion and terror, like perſons unable to recollect themſelves, moſt of them had leaped from their beds, and fled naked from their houſes, without knowing whether their enemies were in poſſeſſion of the town; or whether, by a vigorous reſiſtance they might not be repelled: the mind, on ſo great and ſudden a perturbation, being but little capable of ſuch reflections.

Not ſo Don Nicholas de Salaza, the accomptant of Piura, who happened to be then at Paita, on ſome affairs of his office. This gentleman attended only by a negro ſlave, with an equal preſence of mind and reſolution, threw himſelf into the little fort, built for the defence of that ſmall town, and fired two or three ſhot towards the place where he heard the noiſe of the oars. Upon this the long-boat ſtopped; but the fort was obliged to give over firing for want of hands to aſſiſt an officer who had ſhewn ſo generous an example of reſolution. The Engliſh, concluding very naturally, that the fort was alſo abandoned, landed about half a league N. of the town, to which they immediately marched, and finding it forſaken, entered the fort, where, for fear of any ſurprize, they kept themſelves all night. But the inhabitants thought of nothing but ſaving their lives, and accordingly fled to a mountain, betwixt the Silla and the town, where they concealed themſelves, except a few ſlaves, who finding that the enemy were all retired into the fort, took the advantage of the night, and boldly returned into the town, bringing off ſuch arms and effects of their maſters as the night would permit, hiding in the ſand what they found too heavy to carry up to the top of the mountain.

There was unfortunately then at Paita great quantities of meal, fruits, and brandy, conſigned to the provinces of the mountains, by the way of Piura; beſides other goods depoſited in the warehouſes to be ſent to Panamá. There was alſo no ſmall quantity of gold and ſilver. As ſoon as day-light returned, the Engliſh left their retreat, and ſeeing every place forſaken, they began to enter the houſes, which are ſo many magazines for goods. It was not long before they met with a quantity of brandy and wine, of which, like men whoſe appetites are not to be governed at the ſight of plenty after long diſtreſs, they made a very licentious uſe, and became ſo greatly inebriated, that the mulatoes and negro ſlaves, ſeeing their condition, abandoned their fears, and became ſo familiar with the Engliſh ſailors, as to drink with them, whilſt others carried off hampers filled with the goods of their maſters, together with conſiderable quantities of gold, which they buried in the ſand. The long-boat, however, returned on-board the ſhip, but her chief ſpoils conſiſted of proviſions; and the men employed in that ſervice, regaled themſelves with a degree of intemperance equal to thoſe who guarded the fort.

The inhabitants of Paita, who ſtill timororouſly continued on the mountain, though in want of every thing, diſpatched an expreſs to Don Juan de Vinatea y Torres, the corregidor of Piura, and a native of the Canaries, who, agreeably to his known character of prudence and intrepidity, immediatel aſſembled all the militia of that city and its dependancies, and haſtened by forced marches through a troubleſome ſandy road of fourteen leagues to Paita. The Engliſh had been three days maſters of Paita, when diſcovering theſe ſuccours, and being informed by the negroes and mulatoes, that the militia of Piura, headed by a famous general, were coming to diſlodge them from the town, enraged at this, but wanting courage to defend what they had gained, or rather ſurprized, carried off whatever they could, and took their leave of the place by ungenerouſly ſetting fire to the houſes; an action which could reflect but little honour on the arms of their nation: but was rather a malicious tranſaction, to revenge on the poor inhabitants the coming of the militia, whom they did not dare to face. Nobody indeed imagined at that time that this proceeding was in conſequence of any orders iſſued by the commander, and it was afterwards known that he was nnder great concern for ſuch unjuſtifiable behaviour.

THE corregidor of Piura, as he had been very active in the defence of Paita, ſo he loſt no time in ſending advice of the deſcent to the corregidor of Guayaquil, that he might put that city in a poſture of defence; it being natural to ſuppoſe, that the Engliſh would alſo make an attempt there, as it had always been attacked by every enemy who before infeſted thoſe ſeas. Accordingly the inhabitants of Guayaquil were ſoon in arms, and the beſt meaſures taken with the utmoſt expedition. But the force of the enemy heing uncertain, no other ſhip having been ſeen at Paita than that which entered the port, the corregidor and magiſtrates applied for aſſiſtance to the preſident and audience of Quito; who among other meaſures for ſecuring Guayaquil from the rage of the Engliſh, required us, in his Majeſty's name, to repair immediately to that city, and take upon us the command of the troops, all the juriſdictions having received orders to ſend their contingencies; and to direct the works to be raiſed, and the trenches neceſſary to be thrown up in the places moſt advantageous and moſt expoſed.

As affairs of this nature admit of no delay, we immediately prepared for the journey, and leaving Quito the 16th of December, arrived at Guayaquil on the night of the 24th. But the paſſage of the mountains was inconceivably fatiguing; the natural difficulty and badneſs of the roads, it being the beginning of winter, having been greatly increaſed by the violent rains.

HAVING gone through all the neceſſary operations, and taken the moſt proper meaſures to defeat the attempts of an enemy, and ſuch as we had the pleaſure of ſeeing approved by the council of war held in that city, our longer ſtay only hindered the concluſion of our grand deſign, and was of no further uſe here, eſpecially as it was then certainly known that the enemy's ſquadron had ſailed for Manta, the coaſts of which, though in the juriſdiction of Guayaquil, are nearly twenty-eight leagues N. of that city, and conſequently to leeward of it. It was alſo known that the fleet intended to proceed from Manta to Acapulco. Impatient at the loſs of time we applied to the ſame council of war, who were pleaſed to grant leave for one of us to return to Quito, in order to complete the obſervations ſtill remaining, that on any ſubſequent exigency we might be the more diſengaged; but at the ſame time thought it neceſſary that one of us ſhould continue on the ſpot to act on any ſudden emergency. The matter was ſoon agreed on between Don George Juan and myſelf, namely, that he ſhould remain as commandant of Guayaquil, while I returned to continue the obſervations at Quito. But before I proceed, it will not be amiſs to give an account of the tranſactions of the enemy's ſquadron in thoſe ſeas, according to the depoſitions of ſome priſoners whom they ſet aſhore at Manta.

This ſquadron, at its entrance into the South-ſea, beſides being diſperſed, was in a very ſhattered condition; but arrived ſucceſſively at the iſland of Juan Fernandes, to the number of four ſhips, from fifty to ſixty guns, the Centurion and the Glouceſter, a frigate between thirty-ſix and forty guns, and a victualler. Theſe ſhips came to an anchor cloſe to the ſhore, their crews being very much diminiſhed, and thoſe which remained very ſickly. Tents were pitched, a kind of village built with an hoſpital for the recovery of their men. They arrived at this iſland in the month of June, and the commander was ſo quick in his proſecution of hoſtilities, that as ſoon as a number of ſailors ſufficient to man the frigate were recovered,

covered, ſhe was ſent out on a cruize; and this being in the common tract of ſhips bound from Callao to the coaſt of Chili; they had the good fortune to take two or three, all of them richly laden, particularly the Aranzaza, one of the largeſt employed in theſe ſeas. Great numbers of men died on the iſland of Juan Fernandes, but on the recovery of the remainder, and the ſhips being careened, they ſunk the victualler, and ſome time after the frigate, putting the guns and proviſions on board the Aranzaza. After this the whole ſquadron put to ſea upon freſh enterprizes, and about eight or nine veſſels fell into their hands; and between Paita and the iſland of Lobos, they took a coaſt ſhip of great value. The ſacking of Paita was the laſt act of hoſtility they committed in theſe parts; for the Engliſh commodore having procured intelligence of the ſhort time requiſite to alarm Guayaquil, and finding that there had been abundantly more than ſufficient, prudently abandoned a deſign, againſt which he judged inſuperable precautions had been taken; and indeed had he made an attempt, in all probability thoſe ſpirits would have been depreſſed, which were ſo greatly elevated at their ſucceſs at Paita.

After leaving Paita they ſteered for the coaſt of Manta, where they put the priſoners they had taken in the merchant ſhips on board a long-boat, to make the beſt of their way to the land; the ſhips keeping ten or twelve leagues from the ſhore; but many of the ſailors, negroes, and mulattoes, who had nothing to loſe, voluntarily entered with them. They now determined to ſail for the Philippines, in order to intercept the galleon in her return to thoſe iſlands, and which was to ſail from Acapulco ſome time in January. This was doubtleſs the moſt advantageous ſcheme that could be formed in their circumſtances. But in this they were diſappointed by the Vice-roy of Mexico; who, from the intelligence ſent by the Vice-roy to Peru to all the ports on the coaſt of the ſouth-ſea, as well as by expreſſes diſpatched from Guayaquil and Atacames to Panama, deferred ſending the ſhip that year; which the enemy being apprized of, they burnt the Aranzazu, as they had before the other prizes, and continued their voyage towards the Philippines, where by a long perſeverance in a moſt tedious cruize they accompliſhed their deſigns. For the Acapulco ſhip returning when all the danger was imagined to be over, fell in with the Centurion, and after a ſhort, though ſmart engagement, was taken.

But to reaſſume the thread of the narrative, to which I hope this has been no diſagreeable interruption. On the fifth of January 1742, I ſet out from Guayaquil for Quito, being the very worſt time of the year for performing that journey; and as ſuch I experienced it by ſeveral misfortunes. In one of the rivers we were obliged to ford, the two mules which firſt entered were ſwept away by the current, and that which carried my portmanteau was loſt; and the other, on which an Indian rode and led the former, ſwam with great difficulty to the ſhore, and the Indian ſaved himſelf by holding faſt by the creature's tail; in which manner they were carried near a quarter of a league below the ford. If the travelling up the mountains was not attended with ſuch imminent danger, it was extreamly troubleſome, a ſpace of about half a league, having taken me up from ſeven in the morning till ſeven in the afternoon, the mules though light falling at every ſtep, nor was it an eaſy matter to make them riſe. And ſoon after the creatures became ſo fatigued, they even ſunk under their own weight. At length I reached Quito on the nineteenth of the ſame month; but had hardly alighted from the mule with the hopes of reſting myſelf after theſe dangers and fatigues, when the preſident informed me, that three days before he had ſent away an expreſs, with letters from the vice-roy, directing us to haſten to Lima with all poſſible expedition; and charging him in particular to provide immediately every thing neceſſary that our journey might not be a moment delayed. It was therefore no time to think of reſt; and accordingly after making ſuch proviſions as were abſolutely neceſſary, I ſet out on the 22d of the ſame month, and a third time croſſed that difficult mountain in my way to Guayaquil; where having joined Don George Juan, who was included in the orders, we travelled night and day, with a diſpatch anſwerable to the governor's impatience, all the towns on the road having received orders to keep beaſts in readineſs, that we might not be detained a moment; and accordingly we reached Lima the 26th of February. In the mean time the Vice-roy had ordered a ſquadron of four men of war to ſail from Callao to Panama, for the defence of that place, which place touched at Paita, in order to gain intelligence of the enemy's ſhips, having orders to attack them if poſſible; but, as we have already obſerved, they were ſailed to the coaſt of Acapulco. On our arrival the Vice-roy was pleaſed to expreſs great ſatisfaction at our diſpatch, and to honour us with ſeveral commiſſions ſuitable to the exigence of affairs; giving us the command of two frigates which he had ordered to be fitted out for the ſecurity of the coaſt of Chili, and the iſland of Juan Fernandes, againſt any reinforcement coming to the enemy. For though commodore Anſon had made no ſecret of his intentions to the priſoners, and they had eagerly publiſhed them, no dependance could be had on informations giving out by the enemy himſelf, and which were the more ſuſpicious as he told them openly. Beſides it was well known, that this ſquadron originally conſiſted of more ſhips; and we were apprehenſive, that though the remainder had failed of reaching theſe ſeas, yet by perſeverance, and a ſecond effort, they might ſucceed.

Commodore Don Joſeph Pizarro, had alſo been diſappointed in getting into theſe ſeas this year, though he had attempted it in a ſingle ſhip called the Aſia; but was obliged to put back to Buenos Ayres with the loſs of one of his maſts, and another was carried away juſt at the mouth of the Rio de la Plata. Theſe diſappointments rendered it the more neceſſary for the Vice-roy to provide for the defence of the coaſt of Chili, as all ſhips muſt paſs near it in their courſe to Peru.

CHAP III.

Voyage to the Iſland of JUAN FERNANDES; *with an Account of the Seas and Winds in that Paſſage.*

AMONG other precautions taken by the viligant Vice-roy of Lima, for the defence of the ſouth-ſea, he fitted out, as we have juſt mentioned, two frigates for cruizing on the coaſt of Chili; and gave the command of one, called Nueſtra Senora de Belen, to Don George Juan, and appointed me for the other, called the Roſa: they had been both merchant ſhips employed in theſe ſeas, all the king's ſhips being ſent in the Panama ſquadron. They were between ſix and ſeven hundred tons, each carried thirty guns on one deck, and three hundred and fifty men, all picked and expert ſailors. The ſhips were alſo prime ſailors: ſo that our force was in all reſpects ſufficient for the ſervice on which it was employed; and, with the aſſiſtance of providence, would doubtleſs have anſwered the Vice-roy's expectations.

On the fourth of December 1742, we got under ſail intending to ſteer firſt to the iſland of Juan Fernandes. Our courſe was from S. W. one quarter weſterly, to S. one quarter weſterly, according as the winds permitted, which were continually between the E. S. E. and S. S. E. but not always of the ſame ſtrength; ſometimes ſhort calms intervened, and at others ſudden ſqualls, but did us no great damage. This courſe was continued till the 27th of the ſame month, when being in the latitude of 30° and a little more than 15° W. of Callao harbour, and the wind at N. W. we altered our courſe, ſteering E. S. E. and E. till we made the iſland without that of Juan Fernandes. This happened on the 7th of January 1743, at three in the evening; the S. point of the iſland bearing N. E. one quarter eaſterly, and the N. W. point, N. E. We now continued ſteering E. one quarter northerly, and the next day at eleven in the morning we had ſight of the other iſland called de Tierra, bearing E. N. E. And in the following night having weathered the north point, we the next day came to an anchor in the bay.

During our paſſage from Callao to the tropic we had light winds, often interrupted with ſhort calms; but after we had croſſed the tropic, they were more ſettled, ſtronger, and ſqually, but not dangerous; being of ſhort continuance. But as I have already noticed in another part, they always blow from the S. E. and never from the S. W. till you are fifteen or twenty degrees W. of the meridian of Callao. When we concluded ourſelves in the proper latitude for ſtanding towards the iſlands, and found the wind at N. W. we ſteered E. in order to reach the meridian of Juan Fernandes. The wind then ſhifted round from W. N. W. to W. S. W. and S. and afterwards returned to its uſual rumbs of S. E. S. S. E. and S. E. one quarter eaſterly. On the 27th of December, the wind again veered to the N. W. and continued ſo the whole day; the two ſucceeding days at N. N. W. and N. W. but on the 30th veered to the W. N. W. On the 31ſt it ſhifted to S. S. W. and on the 1ſt of January veered round to the S. S. S. E. and S. E. Thoſe therefore who endeavour to gain ſuch winds, ſtand off from the coaſt till they fall in with them; and this ſometimes happens at a greater diſtance than at others; I mean during the ſummer; for in winter a different courſe is neceſſary, as we ſhall explain in the ſequel.

The atmoſphere of theſe ſeas is generally filled with thick vapours to a conſiderable height: ſo that often for four or five days ſucceſſively, there is no poſſibility of obſerving the latitude. Theſe fogs the ſailors call Sures pardos, and are fond of them, as they are a ſure ſign that the wind will be freſh and conſtant, and that they ſhall not be troubled with calms. At this time it is very common to ſee the horizon filled with a dark cloud, but of no dangerous conſequence, except freſhening the wind a little more than uſual, and a ſhort ſhower of rain; the weather, in four or five minutes, becoming as fair as before. The ſame thing preſages the turbonada, or ſhort hurricane; for the cloud is no ſooner formed on the horizon, than it begins, according to the ſailor's phraſe, *to open its eye*, i. e, the cloud breaks, and the part of the horizon where it was formed becomes clear. Theſe turbonadas are moſt common after you are paſſed the 17th or 18th degree of latitude.

Near the tropic, that is between the parallels of fourteen or ſixteen and twenty-eight degrees, calms greatly prevail during the months of January, February, and even March; and in ſome years more than in others; but near the coaſt they are not ſo common, on account of the land breezes, which are always between the S. E. and E. S. E. Formerly, and even till within theſe few years, the voyage to and from Callao to Chili, was rarely performed in leſs than a twelvemonth; owing to a fear of ſtanding off to a great diſtance from the coaſt: for by tacking along the ſhore they made but little way; and conſequently laid the ſhips under a neceſſity of putting into the intermediate harbours for water and proviſions; but an European pilot making his firſt voyage in the uſual manner, obſerved that the courſe of the currents was from the W. and S. W. whence he concluded that winds from thoſe quarters might be found farther off at ſea. Accordingly in his ſecond voyage he ſtood off to a great diſtance, in order to fall in with thoſe winds, and had the ſatisfaction to find that he was not miſtaken; ſo that he reached Chili in little more than thirty days. This being ſo very far ſhort of the uſual term, he was ſuſpected of ſorcery, and ever after called Brujo, a ſorcerer. From this report, and the evidence of the dates of his papers, perſons of all ranks were perſuaded that he ſailed by magic, and the inquiſition cauſed him to be apprehended; but on examining his journals they applauded his ſagacity, and were convinced that if others did not perform the ſame voyage with equal diſpatch, it was owing to their timidity in not ſtretching off to a proper diſtance from the coaſt as he had done. And thus he had the honour of leading the way in that expeditious courſe, which has ever ſince been followed.

In all this paſſage you have an eaſy ſea, the ſwell coming ſometimes from the S. E. S. or E. being the points from whence the wind blows; at others from the S. W. and W. particularly after you are ten or twelve degrees from the coaſt. And it is only near the iſland of Juan Fernandes, that you meet with a hollow ſea. The courſe of the waves is there ſufficiently manifeſt; for on quitting the coaſt of Callao, to about ſixty degrees farther to the S. their courſe is to the northwards: but from between the parallels of ſixteen and twenty degrees, their courſe is imperceptible; while in higher latitudes they run with ſome force S. and S. W. and with a greater velocity in winter than in ſummer; as I know from my own experience, having in my ſecond voyage to Chili, in the year 1744, at the end of October, and beginning of November, taken the greateſt care, that the diſtances between the knots on the log line ſhould be 47 Paris feet and a half, for meaſuring the ſhip's way; but every day found that the obſerved latitude exceeded the latitude by account ten or fifteen minutes. The ſame obſervation was made by Don George Juan, in both his voyages: as well as by the captain, and officers of the French ſhip, in which I returned; ſo that the reality of the courſe of the ſea is proved beyond exception; and in this manner it continues to the 38th or 40th degree of latitude.

In the latitude of 34° 30′ and 4° 10′ W. of Callao, you meet with a track of green water, extending N. and S. and along which you ſail above thirty leagues. Probably it runs to a great diſtance in that ſea, being found in every latitude to the coaſt of Guatemala; but not always under the ſame meridian, winding away N. W. It is alſo met with in a higher latitude than that of Juan Fernandes; and it has alſo been obſerved by ſhips in their courſe to Chiloe, or Baldivia.

In this paſſage, tho' part of it be at ſuch a great diſtance from the land, we meet with a kind of birds called Pardelas, which diſtinguiſh themſelves from all other ſpecies, by venturing ſo far from the land. They are ſomething larger than a pigeon; their bodies long; their necks ſhort; their tails of a proper proportion, and their wings long and ſlender. There are two ſorts of theſe birds, and of different colours, one parda or brown, from whence they derive their name; the other black, and called pardela gallinera, but in other circumſtances they are entirely the ſame. A ſmaller bird is alſo ſeen in theſe ſeas, called Alma de Maeſtre; it is white ſpotted with black, and has a long tail; but is not ſo common as the Pardelas: They are moſt frequent in ſtormy weather. Within ten leagues of the iſlands of Juan Fernandes, are ſeen ſome balenatos, or ſmall whales; and at near the ſame diſtance, ſea-wolves; but the latter ſeldom go far from the ſhore.

Though this ſea has not been improperly dignified with the appellation of Pacific, with regard to the interval between the tropics; yet that particular cannot with any juſtice be applied to it, if conſidered in its whole extent: tempeſtuous weather being equally common in the latitudes of twenty and twenty-three degrees in the ſouth-ſea, as in the oceans of Europe; and in higher latitudes ſtorms are more frequent and violent. I am inclined to think that the firſt Spaniards gave it the name of the Pacific Sea, from their being greatly pleaſed with its ſmoothneſs, and the gentleneſs of the winds in their firſt voyages; concluding that it was ſo in every part; but the fury of the winter ſtorms, and the roughneſs of the ſea, which are equal to thoſe in any other parts, abundantly demonſtrate, that they formed a judgment too haſtily.

Along theſe coaſts and the adjacent ſea, the winter begins at the ſame time as at Lima; that is in the month of June, laſting till October and November; but its greateſt violence is paſt in Auguſt or September. During the whole winter ſeaſon, there is no dependance on being ſafe from ſtorms, which riſe with a ſudden rapidity; and in all latitudes beyond forty degrees, the winter ſets in conſiderably ſooner, even at the beginning of April, and is alſo obſerved to laſt longer.

The winter in all latitudes beyond 20° is uſhered in by northerly winds. They are not indeed fixed like thoſe of the S. though common to the ſeaſon. They always blow with great violence; but not always with the ſame degree: being leſs ſtrong in the beginning than in the depth of winter, when their rage ſtrikes the moſt reſolute with horror, and raiſes ſuch enormous waves, that the atmoſphere is crowded with vapours; and theſe turn to a drizzling rain, which laſts as long as the ſtorm continues. It often happens that theſe violent N. winds, without the leaſt ſign of an approaching change, ſhifts round inſtantly to the W. which change is called the traveſia, but continues to blow with the ſame force. Sometimes indeed this ſudden change is indicated by the horizon clearing up a little in that quarter: but in ſeven or eight minutes after the appearance of this ſmall gleam of light, a ſecond ſtorm comes on; ſo that when a ſhip is labouring againſt the violence of a ſtorm from the N. the greateſt care muſt be taken, on the leaſt appearance, to prepare for the traveſia; indeed its rapidity is often ſuch as not to allow time ſufficient for making the neceſſary preparations, and the danger is ſufficiently evident if the ſhip has her ſails ſet, or is lying to.

In the month of April 1743, in the latitude of 40°, I had the misfortune of experiencing the fury of a ſtorm at N. which laſted in its full violence from the 29th of March till the 4th of April. Twice the wind ſhifted to the traveſia, and veering round to the ſouthward, returned in a few hours to the N. The firſt time it ſhifted to the W. the ſhip by the vortices formed in the ſea by this ſudden oppoſition to the courſe of its waves, was ſo covered with water from head to ſtern, that the officers who were on the watch concluded ſhe had foundered; but fortunately we had our larboard tacks on board, and by a ſmall motion of the helm, the ſhip followed the change of the wind, and brought to without receiving any damage; whereas we ſhould otherwiſe in all probability have been loſt. Another circumſtance in our favour was, that the wind was ſome points to the weſtward of the N.

For tho' theſe winds are here called nortes, they are generally between the N. and N. W. and during their ſeaſon, veering in ſome ſqualls to the N. and in others to the N. W. Sudden calms alſo often intervene; but if theſe happen before the wind have paſſed the traveſia, it returns in about half, or at leaſt an hour with redoubled fury. Theſe dangerous variations are however indicated by the thickneſs of the atmoſphere, and the denſe clouds in the horizon. The duration of theſe ſtorms is far from being fixed or regular: tho' I well know ſome pilots here will have it, that the N. wind blows twenty-four hours, and then paſſes to the traveſia; that it continues there with equal violence three or four hours, accompanied with ſhowers, which abate its firſt violence; and that it then veers round till it comes to the S. W. when fair weather ſucceeds. I own indeed that I have in ſeveral voyages found this to be true; but at other times I experienced, that the ſucceſſive changes of the wind are very different. The ſtorm at N. I before-mentioned began March the 29th, at one in the afternoon, and laſted till the 31ſt at ten at night, which made fifty-ſeven hours; then the wind ſhifted to the traveſia, where it continued till the 1ſt of April without any abatement, that is, during the ſpace of twenty-two hours. From the W. the wind veered round to the W. S. W. and S. W. ſtill blowing with its former violence. Hence a ſhort calm ſucceeded; after which, it a ſecond time ſhifted to the N. where it continued blowing with its former fury fifteen or twenty hours; then came on a ſecond traveſia; and ſoon after its violence abated, and the next night ſhifted from S.W. to S.E. Thus the whole continuance of the ſtorm was four natural days and nine hours; and I have ſince met with others of the ſame violence and duration, as I ſhall mention in their proper place. What I would infer from my own experience, confirmed by the information of ſeveral pilots, is, that the duration of theſe ſtorms is proportional to the latitude; being between 20 and 30 degrees, neither ſo violent nor laſting as between 30 and 36; and ſtill increaſing in proportion as the latitude is greater.

These winds have likewiſe no regular or ſettled period, the interval betwixt them being ſometimes not above eight days; at others much longer; nor do they always blow with the ſame violence; but are moſt uncertain in the winter, riſing ſuddenly when leaſt expected, tho' not always blowing with the ſame force.

In this ſea a change of the wind from N. to N. E. is a ſure ſign of ſtormy weather; for the wind is never fixed in the N.E. nor does it ever change from thence to the E. its conſtant variation being to the W. or S.W. contrary to what is ſeen in the northern hemiſphere. Indeed in both the change of the wind uſually correſponds with the courſe of the ſun; and hence it is, that as in one hemiſphere it changes from E. to S. and thence to the W. conformable to the courſe of the luminary, ſo in the other it changes, for the ſame reaſon, from the E. to N. and afterwards to W.

It is an old obſervation among the pilots of this ſea, that a day or two before the N. wind begins to blow, there is always ſeen along the ſhores, and about the ſhips, a ſort of ſea fowl, called quebrantahueſſas, i. e. oſſirage, or break bones. Theſe birds ſeldom appear at other times. I am little inclined to believe, much leſs to propagate any vulgar report; but here I muſt declare, that after repeated obſervations, in order to diſcover the truth or falſity of this aſſertion, I always ſaw them before every ſtorm I met with here; and ſometimes even a day before, when there was not the leaſt appearance of the winds coming about to the N. and as the winds increaſed, great numbers of them gathered about the ſhip, ſometimes flying round her, at others ſettling on the waves, but always kept near the ſhip, till fair weather returned. It is ſtill more ſingular, that they are never ſeen either on the ſea or land, except in ſtormy weather; nor is it known where they hide themſelves when it is fair, that they ſhould ſo immediately cover, as it were the ſea, when their natural inſtinct informs them of the approach of a N. wind.

This bird exceeds the ſize of a large duck, has a ſhort thick arched neck, with a large head, and a thick but ſhort bill, a ſmall tail, a riſing back, large wings, and ſmall legs. They are by their plumage, divided into two different kinds, one being white, ſpotted with dark brown, and the upper part of its wings entirely of the latter colour; the breaſt of the other, together with the inſide of the wings, the whole head, and the lower part of the neck is white; but the back, the upper parts of the wings and neck of a very dark brown, and are hence called lamo prieto, black-backs. The laſt kind are, by the pilots, accounted the moſt certain ſign, the others being often ſeen without any alteration of weather immediately ſucceeding. I well knew a pilot here, who was a native of Callao, a man of indefatigable curioſity and exactneſs, never omitting to inſert in his journals the moſt minute circumſtances. His name was Bernardo de Mendoſa, and with him theſe fowls were conſidered as ſo ſure a ſign, that when he was in any of theſe ports, and his ſhip ready to put to ſea, it was his conſtant cuſtom to take a walk on the ſhore, to ſee whether he could perceive any of them in the offing; and if he did, he continued in the harbour till the tempeſt was over; and he aſſured me, that his conforming to this obſervation had been of the greateſt advantage to him; relating, in confirmation of his opinion, that being once at Baldivia, the governor ſo far from regarding his apprehenſions from ſuch preſages, turned them into ridicule, and inſiſted on his putting to ſea; but was ſoon convinced that theſe omens were not chimeras, for the veſſel was hardly out of the harbour when a ſtorm at N. came on with ſuch violence, that it was with the utmoſt difficulty ſhe was ſaved from being wrecked in that bay; and this would infallibly at laſt have been the conſequence had the ſtorm continued ſome time longer; for even when the wind abated, they found it hardly poſſible to carry her into the harbour to repair the damages ſhe had received.

Other obſervations relating to theſe northerly winds are, that they always blow when the ſures are in their ſtrength, in the higher latitudes, and alſo between the parallel of 20° and that of Panama, it being then winter in thoſe climates; and are alſo found in latitudes beyond 20° but never nearer to the equinoctial. Another obſervation is, that during the time of the Briſas, between Panama and the equinoctial, theſe winds are never felt in any part of the Pacific Sea, the S. winds alone prevailing there. Laſtly, it is obſerved that within thirty or forty leagues of the coaſt of Chili, while one part is agitated with ſtorms at N. the S. winds freſhen in another. This, however ſingular it may appear, is no more than what was experienced by the three ſhips, Eſperanza, Belen, and Roſa, which being at the mouth of the bay of Conception, the latter took her leave of them and bore away, with a freſh gale at S. to Valparaiſo, whilſt the others who ſteered for the iſlands of Juan Fernandes, were overtaken in their paſſage by a ſtorm at N.

As in ſummer the S. winds generally ſhift between the S. S. E. and E. S. E. ſo in winter, they continue for ſome time between the S. W. and S. conſequently there is a neceſſity, in the latter ſeaſon, to ſtand out to ſuch a great diſtance from the coaſt in queſt of them as muſt be done in ſummer.

CHAP. IV.

Account of the iſlands of JUAN FERNANDES: *Voyage from thoſe Iſlands to* SANTA MARIA, *and from thence to the Bay of* CONCEPTION.

THE iſlands of Juan Fernandes, which, on account of their ſituation, belong to the kingdom of Chili, are two in number. One, as lying farther to the W. is diſtinguiſhed by the epithet de Afuera; and the other, as nearer the land, or to the eaſtward, is called la de Tierra. The former, which is ſomething above a league in length, is nearly of an oval figure, and the land very high, ſo that it has the appearance of a round mountain; and its ſteepneſs on all ſides renders it every where almoſt inacceſſible. Several large caſcades tumble from its ſummit, and the water of one of them, after a ſucceſſion of long falls among the rock on the S. W. ſide of the iſland, precipitates itſelf into the ſea with ſuch amazing impetuoſity, that its froth may be ſeen at three leagues diſtance. The longitude of this iſland, according to the reckoning of Don George Juan, admitting the currents to ſet towards the S. W. is 3° 20′ W. from the meridian of Callao; but according to my computation 3° 27′. By the coaſt we ſteered from the meridian de Afuera till we reached la de Tierra, we concluded the diſtance between thoſe iſlands to be thirty, four leagues.

THE iſland de Tierra, which is about four hundred and forty leagues to the N. of Cape Horn, is between three or four leagues from E. to W. which is its greateſt length. It is for the moſt part high land, but not deſtitute of ſome plains, though theſe are part of the mountains themſelves. Its valleys are full of trees, and ſome of them an excellent timber. Here is likewiſe the piemento tree reſembling the

Chiapa in New Spain. The plains and little hills produce a ſort of ſtraw, reſembling that of oats, and growing higher than the uſual ſtature of a man. The water, of which ſeveral ſtreams fall from the eminences into the ſea, is very light, creates an appetite, and, among other medicinal qualities, is excellent againſt indigeſtion. Here are many dogs of different ſpecies, particularly of the greyhound kind; and alſo a great number of goats, which it is very difficult to come at, artfully keeping themſelves among thoſe crags and precipices, where no other animal but themſelves can live. The dogs owe their origin to a colony ſent thither not many years ago, by the preſident of Chili, and the vice-roy of Peru, in order totally to exterminate the goats; that any pirates, or ſhips of the enemy might not here be furniſhed with proviſions. But this ſcheme has proved ineffectual, the dogs being incapable of purſuing them among the faſtneſſes where they live, theſe animals leaping from one rock to another with ſurpriſing agility. Thus far indeed it has anſwered the purpoſe; for ſhips cannot now ſo eaſily furniſh themſelves with proviſions here, it being very difficult to kill even a ſingle goat.

Very few birds frequent this iſland, and though we found ſeveral white feathers on the ground, and alſo parts of carcaſes, which ſeemed to have been gnawed by the dogs, we ſaw but very few flying, and thoſe wholly black. It is not indeed improbable, but theſe iſlands may be the winter retreats of ſome kinds of birds, which on the approach of ſummer remove to another climate.

In this iſland are mountains of a great height; and the ſides of thoſe towards the N. are covered with trees of good timber; but few or none are ſeen on thoſe of the S. part, except in the breaches and valleys; owing doubtleſs to the piercing violence of the S. winds, which deſtroys them or checks their growth. On the other hand, every part is covered with tall graſs or ſtraw, already mentioned. Among the various ſorts of trees with which the iſland is decorated, there are none of the American fruit-trees; owing to the coldneſs of the climate, which is increaſed by the violence of the winds, ſo that even the heats of ſummer are moderate.

IN this iſland are three harbours or bays; but thoſe on the W. and E. ſides have only water ſufficient for ſmall veſſels; ſo that the only one proper for large ſhips is that on the N. or rather N. E. ſide of the iſland. The latter, which is properly called Juan Fernandes, conſiſts of a bay formed by the coaſt, but expoſed to the N. and N. E. winds; ſo that in winter no ſhip can lie ſafely in it; and even in ſummer, it is not free from danger, on account of the great depth of water; for within the diſtance of a cable's length or two from the ſhore, it has fifty fathom; and growing deeper as the diſtance increaſes. To this muſt alſo be added the badneſs of the ground, which being of land, and a tenacious mud, mixed with ſhells and gravel, the cables are greatly rubbed by it, and conſequently the anchorage rendered unſafe. The ſhips are alſo expoſed to continual ſqualls cauſed by the Sures, which produce a very troubleſome ſea: violent currents likewiſe ſet into the bay and form dangerous eddies. Laſtly, the ſteepneſs of the coaſt renders it very difficult to be approached on account of the daſhing of the waves againſt it; and accordingly the only ſhips that put into this port are ſuch as belong to pirates, or the enemy; this iſland being the ſole refuge for them in the South ſeas. And they expoſe themſelves to theſe dangers, merely through the neceſſity of taking in water and wood, refreſhing their crews, and furniſhing themſelves with fiſh, which is caught here in great abundance.

THESE foreign ſhips, which in order to refreſh their crews after the fatigues of ſo long a voyage, and the dangers of weathering Cape Horn, make for the harbour of Juan Fernandes, are very careful to ſecure themſelves againſt the above-mentioned dangers, and therefore ſail up to the fartheſt part of the bay, where they moor with an anchor in the water, and another on the S. W. ſhore. But even this precaution is not ſometimes ſufficient to ſecure them, as appears from the wrecks of three ſhips; two of which have been long there, but the other of a more recent date.

The iſland de Afuera is every where prodigious high land, and the ſhores ſo ſteep and craggy, as to afford no convenient landing-place; which, together with its having no harbour, prevents all ſhips, whether thoſe of the enemy, or the country, from touching at it.

The ſea, all around the iſland de Tierra, may be ſaid to be filled with ſea-wolves, of which there are obſerved to be three principal ſpecies; the firſt are ſmall, not being above a yard in length, and their hair a dark brown: thoſe of the ſecond are about a toiſe and a half in length, and of a greyiſh brown colour: and thoſe of the third are in general two toiſes in length, and the hair of a pale aſh-colour. The head of theſe creatures is too ſmall in proportion to the reſt of their body, and terminates in a ſnout; which bearing a great reſemblance to that of a wolf, they have acquired the name. The mouth is proportioned to the head; but the tongue is very thick, and almoſt round. They have a row of large pointed teeth in each jaw, two thirds of which are in alveoli or ſockets; but the others, being the moſt hard and ſolid are without them. This threatening appearance is heightened by whiſkers like thoſe of cats, or rather tygers. Their eyes are ſmall; and their ears, from the root to the extremity, not above ſix or eight lines in length, and of a proportional breadth. Their noſtrils are alſo very ſmall; and the only parts deſtitute of hair, theſe having a glandulous membrane, like the ſame part in dogs. This creature has two fins, which ſerve them both for ſwimming in the water, and for walking on the ground. The tail, which is every where equally cartilaginous, is of a length proportional to the body, but much thicker than thoſe of the generality of fiſh. They carry it horizontally; ſo that by inverting the laſt vertebræ, where the articulations are more flexible than in other parts, they form of it a kind of hind feet; and at the ſame time the fins helping them before, they walk without trailing the body along the ground. A remarkable particular in the formation of this amphibious creature is, that in both the fins and the extremity of the tail there are protuberances reſembling fingers, they are ſmall bones or cartilages incloſed within thoſe callous membranes, which cover the fins and tail. Theſe fingers they can expand ſo as to cover the whole breadth of the fin; and thus form, as it were, the ſole to tread upon. At the end of each is a nail of about two lines in length, and half a line in breadth.

Among the ſeveral articulations in the fins are two very remarkable, one at the junction of the Omoplata, where it forms a kind of ſhoulder, and the other at the extremity of the fin, where the fingers are connected. The ſame œconomy is obſerved in the tail; and thus they are adapted to an amphibious life: accordingly, though not with a celerity equal to that of quadrupeds, they climb up ſteep rocks of a height one would think them impracticable to ſuch creatures, as they are abſolutely ſo to men; and come down again with the ſame eaſe, notwithſtanding their great bulk and fatneſs, which is ſuch in the larger ſpecies, that their diameter at the fins is little ſhort of a yard and a half.

Their organs of generation are placed at the lower extremity of the belly, and at the time of coition the male and female place themſelves on their tails, with their faces inward, embracing each other with their fins, which, on this occaſion, ſupply the place of arms. The female brings forth and ſuckles her young in the ſame manner as terreſtrial creatures; but has never above one or two at a time.

The largeſt ſpecies are by ſome called ſea lions, but in theſe ſeas their general name is Lobos de Aceyte, or oil wolves: becauſe when they move they appear like a ſkin full of oil, from the motion of the vaſt quantity of fat, or blubber, of which their enormous body conſiſts. And though oil is made from all the ſpecies, none yield it in proportion to theſe; indeed they conſiſt of little elſe. I was once entertained with a particular circumſtance relating to this ſpecies. A ſailor having wounded one, it immediately plunged itſelf into the ſea; but had hardly tinged the water with its blood, when it was ſurrounded in an inſtant by ſhoals of the other two ſpecies, who attacked and devoured it in a few minutes, which was not the caſe with the other ſpecies; which, when wounded, though they alſo plunged into the water, yet the ſight of their blood had no effect on others; nor were they ever attacked. They are miſchievous, and their bite the more dangerous, as they never let go their hold; but they are heavy, torpid, and ſluggiſh; nor can they turn their heads without great difficulty. They were ſo far from avoiding our men, that they were obliged to ſtrike them with ſticks to make them move out of their way. The cry of their young very nearly reſembles the bleating of a ſheep; but when they all join, as it were in concert, the noiſe is inſupportable. They are the chief food of the dogs, who after killing them, take off their ſkin with great dexterity. In their attack, they aim always at the throat; and when they have deſtroyed the creature, they tear the ſkin all round the neck; then ſeizing it by the head, and putting their fore-feet between the ſkin and the fleſh, they ſtrip it entirely off, and then devour the carcaſe.

THE largeſt kind, as we have already obſerved, are, by the ſailors, called ſea-lions, the hair of the neck diſtinguiſhing them from the others, and has ſome reſemblance to a mane, though not much longer than that on the other parts of the animal; but as their whole body has a greater ſimilarity to that of the wolf, and being entirely like the other ſpecies, the name of ſea-wolf, ſeems to be more proper than that given them by the ſeamen.

ALL theſe kinds of ſea-wolves have ſo tender a ſenſation at the extremity of their noſtrils, that though they will bear many wounds in other parts of the body, the ſlighteſt ſtroke on this diſpatches them; and that they are ſenſible of it, is evident from their making it their chief care to defend that part from any violence.

A GREAT ſingularity is alſo obſervable in the dogs of this iſland, namely, that they never bark. We caught ſome of them, and brought them on board; but they never made any noiſe till joined with ſome tame dogs, and then indeed they began to imitate them, but in a ſtrange manner, as if learning a thing not natural to them.

THE iſlands of Juan Fernandes abound greatly in fiſh; among which are two ſpecies, not obſerved in any other part of this vaſt ſea. One is the cod, which, though not abſolutely like that of Newfoundland, the difference is very minute, either with regard to colour, form, taſte, and even the ſmall ſcales obſervable on that fiſh. They are of different ſizes, but the largeſt three or four feet in length.

THE other ſpecies is a fiſh reſembling the tollo in ſhape, but much more palatable. From the fore part of each of the two fins on its back, grows a kind of triangular ſpur, a little bent, but round near the back, and terminating in a point. It has a fine gloſs, and the hardneſs of a bone. At the root of it is a ſoft ſpongy ſubſtance. This ſpur, or bone, for it reſembles both, is ſuch a preſent remedy for the toothach, that the point of it being applied to the part affected, it entirely removes the pain in half an hour. The firſt account I had of this ſingular virtue was from a Frenchman, who was my pilot; but as reaſon would not permit me to give credit, without experience, to a circumſtance ſeemingly ſo void of probability, the aſſeverations of the man increaſed my deſire of putting it to the proof, which I did ſeveral times, and always with ſucceſs I did not fail to communicate a diſcovery of ſuch great benefit; and accordingly ſeveral of my acquaintance, who laboured under that excruciating pain, made trial of it, and found from it the ſame happy effects; with this particular circumſtance, that ſoon after the application of the bone to the part affected, it became inſenſible of pain, a drowſineſs ſucceeded, and they awaked free from the torture. I obſerved that the ſpongy ſubſtance at the root, during the operation, became gradually inflated, and ſofter than in its natural ſtate, which could not be effected ſolely by the moiſture of the mouth, the part put into it being compact, hard, and ſmooth as ivory. I am therefore inclined to think that it has an attractive virtue, which extracts the morbific humour, and collects it in the root. The common length of theſe anodyne ſpurs, or bones, is two inches and a half, of which one moiety, together with the root, is within the body of the fiſh. Each face of the triangle is about four lines in breadth. They are taken in the ſame plenty as the others.

The abundance of fiſh about theſe iſlands is ſuch, that two hours fiſhing in the morning, and as many in the evening, with only ſix or eight nets, procured not only a ſufficiency for all the ſhip's company, but a conſiderable quantity remained for ſalting. The chief kinds are cod, berrugates, the ſpur fiſh, ſole, turbet, jureles, and lobſters; beſides an infinite number of ſmall fiſh, which covered the water; a circumſtance the more ſurprizing, as there are ſuch multitudes of ſea-wolves all along the coaſt, which live on nothing elſe. For though there is very little fiſhing near theſe iſlands, yet doubtleſs the conſtant ravages of ſuch enormous creatures, may be thought at leaſt equal to the capture of a large fiſhery.

These ſeveral ſpecies are all ſo delicate and palatable, that the epicure would be at a loſs which to prefer. The lobſters are often half a yard in length, and are taken even with greater eaſe than the others. They are of an exquiſite taſte, though the meat is ſomething hard. The berrugate is a large ſcaley fiſh.

We continued at anchor near this iſland till the 22d of January, during which time, we reconnoitred every part of it, and particularly viſited the place where the Engliſh had erected their tents, in order to diſcover any private ſignal they might have left for the information of any other ſhips that ſhould afterwards touch at this iſland. The preſident of Chili had, with the ſame view, ſent a ſhip hither ſome months before our arrival; but all they met with was two bottles, in each of which was a writing in cypher; and all we diſcovered were the piquets and poles of the tents; with their ſmall wooden bridges for croſſing the breaches, and other things of that kind. Both our frigates having taken in water and wood, we ſailed at three in the afternoon for the iſland of Santa Maria, which we made on the 5th of February, and after carefully ſurveying it on all ſides, continued our courſe till half an hour after ſeven of the ſame day, when we came to an anchor at Puerto Tome, on the E. ſide of the bay of Conception.

At our departure from the iſland of Fernandes, we ſteered firſt E. one quarter ſoutherly, and the winds continuing between the S. and S. E. we tacked on the 23d and ſteered between the W. S. W. and S. S. W. but on the 27th, being in the latitude of 35° 33′ 30″

33′30″S. lat. and a degree W. of the meridian de Afuera de Juan Fernandes, we obſerved the winds to ſhift from S. to S. W. accordingly we altered our courſe, ſteered E. and E. S. E. till the 31ſt day, when we found ourſelves in the latitude of 36° 23′ and about fifteen or twenty leagues N. W. of the bay of Conception. But the weather, which had been the ſame alſo the day preceding, was ſo hazy, that we could not ſee the other frigate. Sometimes indeed we diſcerned the colours, but without having any ſight either of the hull or maſt. † This was however ſufficient to aſſure us that they were within half a cannon ſhot of each other. This, and our being ſomething to leeward of the bay, obliged us to ſtand to ſome diſtance off to ſea; and thus we kept along the coaſt without venturing to approach it till the fifth, when at half an hour after nine in the morning, the weather cleared up, and gave us ſight of Cape Carnero, bearing S. S. E. ten or twelve leagues; and the middle part of Santa Maria, N. E. one quarter northerly. We crowded ſail towards the latter, and at eleven the frigates lay to. Cape Rumena bearing S. one quarter eaſterly diſtance four leagues, and Cape Lavapies E. one quarter N. E. diſtance two leagues. The S. point of the iſland of Santa Maria, bore N. E. four leagues diſtant, the N. point of the ſame iſland N. N. E. and a large rock without, N. one quarter eaſterly. Here we ſent our long boat with orders to go betwixt the iſlands and the continent, and take a ſurvey of it, and then join us in Conception bay. Accordingly the frigates got under ſail at twelve at noon, with a freſh gale at S. S. E. and ſoon after came to an anchor in the ſaid bay.

Don George Juan, from his reckoning concluded that the iſland of Santa Maria, which lies in 37° 3′ S. latitude, was 7° 10′ E. of the iſland de Afuera de Juan Fernandes. Whereas I differed 14′ from him, making it only 6° 56′.

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† This I ſuppoſe is a miſtake, and ought to be read thus; ſometimes we ſaw the looming of the ſails, but could not perceive the hull. A.

To the N. W. of this iſland, at the diſtance of a league and a half, is a lofty ſteep rock, with ſeveral ſmaller at its foot; and one league and a half farther to ſeaward, alſo on the N. W. ſide of the iſland, is a ſhoal, which, though we at this time ſaw no breakers on it, we took care to keep at a proper diſtance. And in my ſecond voyage in the year 1744, I had a clear view of it, for I not only ſaw the breakers, it being then low water, and the ſea running high, but alſo a reef of rocks at the water's edge. The country pilots have aſſured me, that by ſteering in the middle between this ſhallow and the rock, there is a very ſafe channel, having in moſt parts fifty or ſixty fathom water.

In my ſecond voyage above-mentioned, on board a French frigate called La Delivrance, in the latitude of 36° 54′ and 2° 24′ W. of the iſland of Santa Maria, about half an hour after making our obſervations, we unexpectedly found ourſelves in a tract of thick water of a yellowiſh colour; which naturally occaſioning a great ſurprize, we ſtarted from the table, being then at dinner, and haſtened up to the quarter deck. It was now too late to put the ſhip about; ſhe being in the very center of it. This ſhoal, as it appeared to us, ſtretched near two leagues from N. to S. and was about ſix or eight hundred toiſes over from E. to W. The colour of the water was of ſo deep a yellow, that after providence had happily carried us through it, we could eaſily diſtinguiſh it at a conſiderable diſtance. I muſt own our conſternation was ſuch from our concluding we were on a ſhoal, as there was all the appearance of it, that we had no thoughts of bringing the frigate to, till we had got our ſounding line in order. In ſome parts the water was of a deeper yellow, as being more ſhallow. In others we could perceive rays of ſea or green water, intermixed with that of the ſhoal. No chart has taken any notice of it; nor was it indeed before known to any of the pilots of theſe ſeas, as they themſelves acknowledged, notwithſtanding their repeated voyages. We ſhould therefore have been guilty of a great indifference with regard to the public ſafety, had we neglected to have given this account of it.

The general winds between the iſlands of Juan Fernandes and this place, are the ſame as thoſe which reign in the gulph; and which have been already deſcribed; but the currents are different, ſetting N. W. and this becomes the more perceivable in proportion as you approach nearer to the coaſt. From the iſland de Tierra de Juan Fernandes eaſtward, the water is greeniſh, and weſtward bluiſh. This I have myſelf obſerved ſeveral times, even when not in ſight of the iſland; and alſo that the colour of the water changes with the meridian. Between the iſlands and the continent, I have frequently ſeen the water ſpouted up by the whales; an appearance which has been often taken for breakers.

Within twenty or thirty leagues of the coaſt, we met with large flights of curlews; but this diſtance is the utmoſt limit of their excurſions. Theſe birds are of a midling bigneſs, moſtly white except the breaſt and upper part of the wings, which are of a roſe colour. Their heads are proportionate to their bodies, but their bill very long, ſlender, and crooked; and as ſmall at the root as at the point. They fly in vaſt troops, and conſequently are eaſily known.

The coaſts in general of this ſea from Guayaquil to the ſouthward are very difficult to be ſeen, except in ſummer time, being the whole winter covered with ſuch thick fogs, that no object can be diſcerned at half a league diſtance. And this dangerous hazineſs extends often to the diſtance of fifteen or twenty leagues off to ſea. But during the night, and till about ten or eleven in the morning, the fog is only on the land. At that time it moves farther to ſeaward, with a prodigious denſity reſembling a wall, totally concealing every object on the other ſide of it: and the cautious mariner forbears to make his way through it, being uncertain whether he ſhall meet with clearer weather, as he approaches nearer to the coaſt.

These winter fogs on the coaſt of Chili, ſeem to be occaſioned by the north winds; they being obſerved always to thicken when thoſe winds blow; and though the atmoſphere be clear when the wind ſhifts to that quarter, it is inſtantaneouſly filled with thoſe vapours; which continue without any diminution, till the S. winds ſet in, and have blown freſh for two or three days ſucceſſively. But as in winter they are uſually interrupted by the winds at N. W. and S. W. theſe vapours, ſo inconvenient to commerce, are ſeldom totally diſperſed; and it is a common phraſe among the mariners of theſe parts, that the N. is a filthy wind on account of the diſagreeable vapours, with which it is loaded, and the S. is a cleanly wind, ſweeping theſe nuiſances from the coaſt and country, and purifying the air. I call theſe winter fogs, as they are equally common all along the coaſt from the parallel of twenty to the equinox, where no N. winds are known. And as I have already related of ‡ Lima, all the inhabitants of the coaſt, live, during the winter, in a perpetual fog.

I shall conclude this chapter, with a table of the variations of the needle obſerved in my ſecond voyage, in the frigate La Delivrance, from Callao, to Conception Bay.

South Lat.		Long. from Callao.		Variations and their kinds.	
Deg.	min.	Deg.	min.	Deg.	min.
22	13½	351	03	7	58 E.
25	37½	349	51	9	22
28	27	348	46	9	42
32	10	350	45½	9	58

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‡ Book I. Chap. VI.

Deg.	min.	Deg.	min.	Deg.	min.
32	52½	351	14½	9	06
33	51½	352	32	10	00
35	06	354	39½	11	10
36	57	000	47½	11	15

Don George Juan, who ſailed from Callao, with the Delivrance, as commander of the Lys, another French frigate, made the following obſervations.

South Latitude.		Long. from Callao.		Variations and their kinds.	
Deg.	min.	Deg.	min.	Deg.	min. E.
12	06	000	00	8	52
12	50	359	00	7	48
23	00	350	00	6	00
25	30	349	15	5	00
27	00	348	30	5	15
30	45	349	00	6	00
33	30	352	20	7	10

Without the iſland of Juan Fernandes.

33	50	356	00	8	30
33	40	000	00	10	30
33	45	002	00	10	45

On the coaſt of Valparaiſo.

33	20	005	00	12	30

The ſenſible difference between theſe variations aroſe from the difference of the needles, by which they were obſerved; and the reaſons for that difference have been conſidered in another place.

The difference of the meridians between Callao and Conception, appears from the ſeries of obſervations made by us at Lima, and thoſe by father Fevillee, at the ſame place, to be 3° 58′ which is the eaſtern diſtance of Conception from Callao, yet in the maps of this country it is placed eight or nine degrees to the eaſtward, a miſtake proceeding from a want of attention

tion in the pilots in obſerving the direction of the currents; and as theſe carry the ſhip towards the S. W. the pilots, when in the offing, begin to compute their diſtance from the coaſt. But this being in reality much greater than that given by the rhumb, they are afterwards under a neceſſity of ſteering towards the E. and thence their reckoning makes the port farther to the eaſtward than it really is; and the currents running ſometimes with a greater velocity than at others, pilots often differ in placing the meridian of Conception, ſo that very few at firſt make the cape, tho' aſſiſted by that chart, which they conſider are the beſt. For all theſe draughts are laid down from the falſe concluſions of erroneous journals, no allowance having been made for the ſetting of the currents. The difference of latitude proves beyond contradiction the reality of the currents, and the degree of their velocity as I have already noticed.

ON the 26th of January the Eſperanza, a Spaniſh frigate, commanded by Don Pedro de Mendinueta, came to an anchor in the harbour of Talcaguano, after her voyage from Monte-video in the river of Buenos Ayres, round Cape Horn, which ſhe had performed in ſixty-ſix days. On our arrival at Puerto Tome, an officer came on board the Belin, the very ſame night we came to an anchor; and the day following, being the ſixth of February, our two frigates joined the Eſperanza, at Talcaguano, and formed a little ſquadron under the command of Don Pedro de Mendinueta, according to orders from the Vice-roy, who had received an account that the Eſperanza lay ready at Monte-video, to proceed on her voyage that ſummer into the ſouth-ſea, and that commodore Don Joſeph Pizarro, with other officers were travelling over land to Santiago de Chili; which he had reached at the time of our arrival.

CHAP V.

Deſcription of the City of CONCEPTION, *in the Kingdom of* CHILI; *with an account of its commerce, and the fertility of the country.*

CONCEPTION, otherwiſe called Penco, was firſt founded by captain Pedro de Valdivia, in the year 1550. But the powerful revolts of the Indians of Arauco and Tucapel obliged its inhabitants to remove to Santiago. They cannot, however, be charged with having quitted their ſettlement till they had been defeated ſeveral times by the Indians, in one of which they loſt the abovementioned Pedro de Valdivia, who as governor of that kingdom, was commander in chief of the forces employed in the conqueſt of it. The ſame unhappy fate alſo attended Franciſco de Villagra, who as Valdivia's lieutenant general had ſucceeded in the command. Theſe misfortunes, and the ſuperiority of the allied Indians, obliged the Spaniards to abandon Conception. The inhabitants however being deſirous of poſſeſſing again their plantations in the neighbourhood of that city, and of which they uſed to make ſuch large profits, petitioned the audience of Lima for leave to return to their original city. But had ſoon ſufficient cauſe to repent of not having exerted their induſtry in improving the place whither they had retired, the Indians, on the firſt notice that the Spaniards were returned to the city, forming a powerful alliance under a daring leader, called Lautaro, took by ſtorm a ſmall fort, which was the whole defence of the city, and put all to the ſword, except a ſmall number who had fortunately eſcaped to Santiago. Some time after Don Gracia de Mendoza, ſon to the Vice-roy de Mendoza, Marquis of Canete, arriving as governor of Chili, with a body of forces ſufficient for making head againſt the Indians, reſtored the inhabitants of

Conception to their former poſſeſſions, with the greateſt apparent ſecurity. But the year 1603 gave birth to a new and more general confederacy, by which means Conception, La Imperia, and Baldivia, with ſix ſmaller places, were deſtroyed; being the greateſt part of the places in this kingdom. Conception, however, received freſh ſuccours, the city was again repaired, and has continued ever ſince.

Its latitude, according to an obſervation we made in the year 1744, at Talcaguana, which lies exactly E. and W. with the city, is 36° 43′ 15″ S. and its longitude from the meridian of Teneriff, according to Father Fevillee, 303° 18′ 30″. The city is built on the S. W. ſhore of a beautiful bay, on an uneven ſandy ground, and on a ſmall declivity, having a little river running through it. The city in its extent, is ſcarce equal to one of the fourth claſs. The deſtruction it ſuffered in the dreadful earthquake of 1730, occaſioned all the houſes to be built low, though it had before been ſubject to theſe ſudden convulſions of nature. This was, however, the laſt of thoſe remarkable for their melancholy conſequences, which extended to Santiago, the capital of the kingdom, which was involved in the ſame ruin. On the 8th of July, at one in the morning, the firſt motions were felt, and the concuſſions increaſing, the ſea retreated to a conſiderable diſtance; but in a ſmall time returned ſo impetuouſly, and with ſuch a ſwell, that it overflowed the whole city, and the neighbouring countries. In this ſudden calamity the inhabitants had no other aſylum than the neighbouring eminences. This inundation was ſoon ſucceeded by three or four ſhocks; and at about four in the morning, a little before day break, the concuſſions returned with the moſt tremendous violence, demoliſhing the few building which had withſtood the firſt ſhocks, and the rapid motion of the ſea.

The houſes are all either of topias, or mud walls, or adoves, unburnt bricks; but covered with tiles.

The churches are ſmall and mean; the ſame may be ſaid of the Franciſcan, Auguſtine, and Dominican convents, as well as thoſe belonging to the fathers of mercy: but the college of Jeſuits is not wholly deſtitute of elegance, being will built and of a tolerable architecture.

The political government of this city conſiſts of a corregidor, nominated by the king, and who is at the head of the ordinary alcaldes and the regidores. During the vacancy of this poſt, the duty is performed by the preſident of Chili, who is governor, and captain-general of the whole kingdom, and preſident of the audience of Santiago, on which, as its capital, Conception is dependant. The court of audience was originally eſtabliſhed in the latter, and continued there from the year 1567, to 1574; but the danger and diſturbances, occaſioned by the frequent revolts of the Indians, cauſed it for a while to be ſuppreſſed, and afterwards to be removed to the city of Santiago. The preſident is, however, obliged to reſide ſix months of the year at Conception, that he may attend carefully to the military concerns of the frontiers, ſee that the forts be in a good condition, and well provided with every thing, in order to keep the Indians of Arauco in awe, and that the military forces are in good order, and well diſciplined, and always in readineſs to repel any attempts of the Indians, provided they ſhould ever abandon their dread of the Spaniſh troops. During the other ſix months, when the governor reſides at Santiago, he acts in a very different character; hearing complaints, redreſſing grievances, and adminiſtring juſtice, that this tribunal may receive the greater dignity from his preſence. Here is alſo a chamber of finances, at the head of which is an accountant and treaſurer. Beſides which Conception has likewiſe all the other courts and offices uſual in the cities of South America.

As all the inhabitants of the towns, villages, and country, within the juriſdiction of Conception, form different bodies of militia, ſome of which are in pay, and all muſt be ready on any ſudden alarm, there is, beſides the corregidor, a Maeſtra de Campo, who commands in all the military affairs without the city; but we ſhall have occaſion to give a farther account of his duty in the ſequel.

This city at firſt belonged to the dioceſs of Imperial; but that being ruined by the perpetual incurſions of the Indians, the epiſcopal ſee was removed to Conception, and the chapter changed. It is now a ſuffragan of Lima, and has a chapter conſiſting of a biſhop, dean, archdeacon, and two prebendaries.

The juriſdiction of Conception extends from the river Maule on the coaſt N. of the city to Cape Lavapies. It has few villages; but the whole country full of ſeats, farms, and cottages.

The inhabitants conſiſt of Spaniards and Meſtizos, who in colour are hardly diſtinguiſhable from the former; both being very fair, and ſome have even freſh complexions. The goodneſs of the climate, together with the fertility of the country, have drawn hither many Spaniſh families, both Creoles and Europeans, who live together in that harmony and friendſhip, which ſhould be an example to the other parts of theſe provinces; where the comforts of ſociety are greatly leſſened by the feuds ariſing from a mean pride and jealouſy. The men in general are well-ſhaped and robuſt, and the women handſome. Their cuſtoms and dreſs, are a kind of compound of thoſe of Lima and Quito, but more nearly reſemble the latter, except that the men uſe, inſtead of a cloak, a poncho, which is made in the form of a quilt, about two yards and a half or three in length, and two in breadth, having an opening in the middle juſt ſufficient to put their head through, the reſt hanging down on all ſides. (Plate VII.) This is their dreſs in all weathers, whether walking or riding. The peaſants, whom they call Guaſos, never pull it off but when they go to reſt, tucking it up in ſuch a manner, that both their arms and whole body are at full liberty either for labour or diverſion. This is an univerſal garb among all ranks when they ride on horſeback, an exerciſe very common here; and the women are particularly famous for their ſkill in horſemanſhip.

This dreſs, though ſo plain and uniform in itſelf, ſerves to diſtinguiſh the rank and quality of the wearer; as its price is proportional to the work on it. Some wear it as a covering, ſome for decency, and others for ſhew. Accordingly if thoſe of the common people coſt only four or five dollars, others have ſtood the owners in an hundred and fifty, or two hundred. This difference ariſes from the fineneſs of the ſtuff, or from the laces and embroidery, with which they are decorated. They are of a double woollen ſtuff, manufactured by the Indians, and generally of a blue colour, embroidered with red or white, ſometimes indeed, the ground is white, embroidered with blue, red, and other colours.

The peaſants are ſurprizingly dextrous in managing the nooſe and lance; and it is very ſeldom, that though on full ſpeed they miſs their aim with the former. Accordingly theſe are their chief arms, and they will halter a wild bull with the ſame agility as any other creature; nor could a man, however cautious, avoid being taken in their nooſe. I ſhall relate an inſtance of their addreſs, with regard to an Engliſhman whom we knew at Lima. He was in the long-boat of a privateer, then lying in Conception bay, intending to land at Talcaguano, with a view of plundering the neighbouring villages; but a body of the country militia made to the ſhore in order to oppoſe them. Upon this the Engliſh fired upon them with their muſquetry, imagining that would be ſufficient to put them to flight, and thus the place be open for them to land. They had no ſooner diſcharged their pieces, than one of the peaſants, though the boat was at a conſiderable diſtance, threw his nooſe, and notwithſtanding all in the boat threw themſelves on their faces, he nooſed the above-mentioned perſon, pulling him out of the boat with the greateſt rapidity; whilſt the others, inſtead of endeavouring to ſave him, in their fright thought of nothing but how to get out of danger as ſoon as poſſible. It was the Engliſhman's good fortune not to be ſtrangled or killed by the bruiſes he received, the ſlip knot having paſſed from one ſhoulder under the oppoſite arm, ſo that he recovered in a few days.

As it is very ſeldom that they miſs, and are obliged on haltering a creature, to draw the knot, at the ſame time that they throw the nooſe, they clap ſpurs ro their horſe, and put him on his full ſpeed; that the creature is ſo far from having time to diſengage itſelf, that it is no ſooner caught than diſabled. This is alſo one of the weapons, if I may give it that name, uſed in their private quarrels, defending themſelves with a lance of a middling length. And their addreſs, on theſe occaſions, is ſo very remarkable, that very often, after a long diſpute, in which both parties are heartily tired, they part with no other hurt than a few bruiſes. This is alſo the method they take to ſatisfy their revenge, endeavouring to halter the object of their hatred, either as he runs from them, or is not apprized of their intention. In this caſe the only reſource in an open country on ſeeing him with his nooſe in his hand, is, to throw one's ſelf on the ground, keeping the legs and arms as cloſe to the ſurface as poſſible, that the rope may have no room to get under any part. The perſon may alſo ſave himſelf by ſtanding cloſe to a tree, and, if in the ſtreet, by placing himſelf againſt the wall. A ſmall diſtance, that is, under ten or fifteen paces, partly renders their dexterity ineffectual; but there is very great danger of being entangled when the diſtance is thirty or forty. The nooſes, or halters, are thongs of a cow's hide, cut round the ſkin, and of a proper breadth. Theſe thongs they twiſt, and work with fat, till they are of a proper degree of ſuppleneſs; but ſo ſtrong, that though when twiſted they are not larger than the little finger, yet they hold the wildeſt bull, when its efforts to eſcape would break a rope of hemp of much larger dimenſions.

The climate of this city is not eſſentially different from that of the greateſt part of Europe. Winter is indeed ſomething colder than in the ſouthern provinces of Spain, but milder than thoſe of the northern; and the ſummer heats proportionably. In winter the inhabitants ſeem to be little incommoded by the N. winds, and in ſummer the heats are moderated by the cooling breezes from the S. The heat is however greater in the city than in the adjacent country, occaſioned chiefly by the different diſpoſition of the ground, being interſected by various rivers, ſome of which are very large, as the Arauco and the Biobio. The latter of which, at a league above its mouth, is very near four leagues in breadth. It may, however, in ſummer be forded, but not without danger; in the winter it is paſſed in balzas. At the ſouthern banks of the river, the territories of the wild Indians begin, and near the ſame ſhore towards that part are the chain of frontier forts, of which a farther account will be given in the ſequel. The country of this juriſdiction conſiſts principally of extenſive plains, the Cordillera being at a conſiderable diſtance to the eaſtward, and the whole ſpace between it and the ſea coaſt, one entire and uniform plain, interrupted only by a few eminences, which are an ornament to the country, and render the perſpective of it the more agreeable.

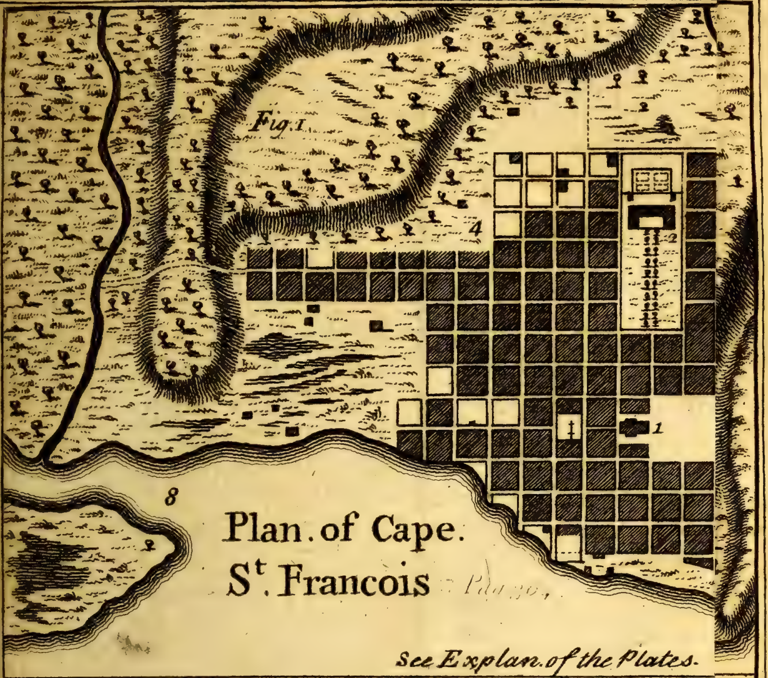
Fig. 1
4
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Pag. 30.

Plan. of Cape. St. Francois

See Explan. of the Plates.

Fig. 2. Men of Chili Pag. 235.

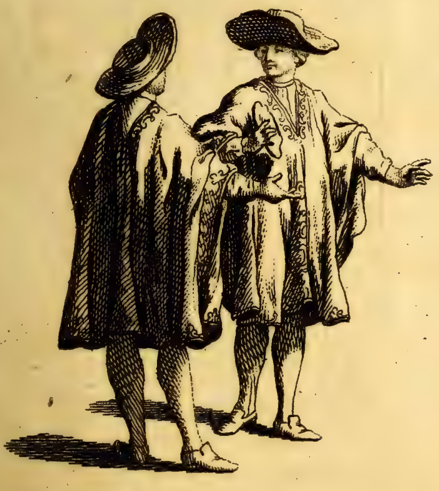

Fig. 3. M

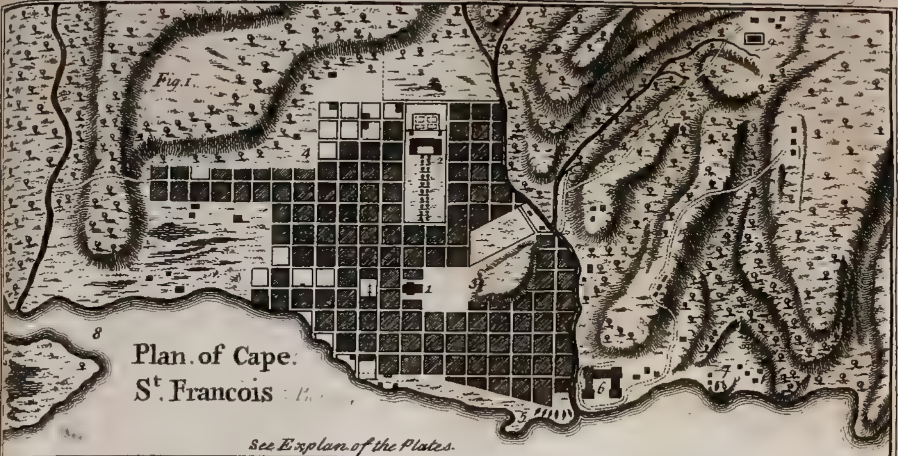
Fig. 1.
Plan of Cape St. Francois
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See Explan. of the Plates.

Fig. 2. Men of Chili Pag. 235.

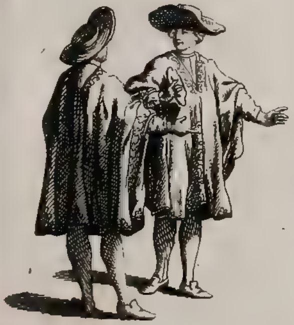
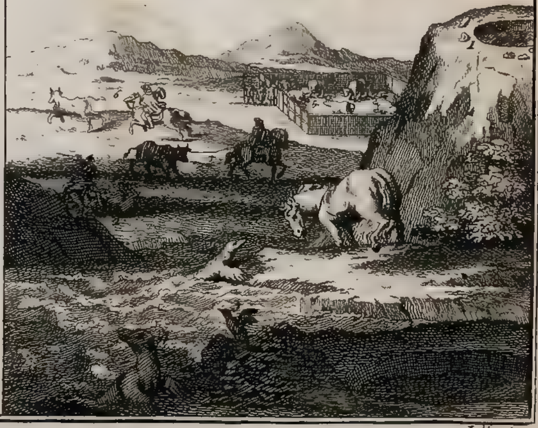


Fig. 3. Manner of Killing the Beasts in Chili.



J. Mynde sc.

The great affinity between this climate and that of Spain is evident from its products, though there is a remarkable difference with regard to their goodneſs and plenty, in both which this country has greatly the advantage. The trees and plants of all kinds have their regular ſeaſons, embelliſhing the fields with their verdure, entertaining the ſight with their various flowers and bloſſoms, and gratifying the palate with their delicious fruits. It is needleſs to mention that the times of the ſeaſon muſt be oppoſite, conſequently the winter in Spain is their ſummer, and the autumn of the former, the ſpring of the latter. In ſaying that this country produces the ſame corn and fruits as Spain, I do not mean thoſe of the moſt ſouthern parts; for neither ſugar-canes, oranges, nor lemons thrive here. Nor is it well adapted to olive-yards, though ſome olives are produced here. But the fruits cultivated in the center of Spain, are the ſame with thoſe produced here in a moſt aſtoniſhing plenty, wheat and other grain, generally producing an hundred fold. I ſhall here relate an inſtance I myſelf ſaw and examined at Talcaguano, in a garden near the ſea ſide, at a place called the Morro, very little more than a quarter of a league from the harbour. Among ſeveral ſtalks of wheat that had grown there without culture, I ſaw one whoſe ſtem was not more than a foot from rhe ground, but from its knots there afterwards ſprung ſo many ſtalks, as produced thirty-four ears *, the largeſt of which were near three inches in length, and the leaſt not leſs than two. The maſter of the houſe obſerving that I viewed this production of nature with aſtoniſhment, told me that it was nothing extraordinary, for though the grain in the ground commonly ſown, did not often attain ſuch a luxuriancy, it was com-

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* This ſpecies of wheat is called *Triticum ſpica multiplici*, and is cultivated in Italy and Sicily.

mon for each ſtalk to produce five or ſix ears. This information raiſed my curioſity; and I met with ſo many inſtances afterwards, that my ſurprize at ſeeing the ſtalk juſt mentioned was greatly abated; as from the moiſture, advantageous expoſure, and richneſs of the ſoil, a much greater produce might naturally be expected than in the ground conſtantly ſown.

The great plenty of wheat here is ſufficiently indicated by its price; a meaſure weighing ſix arobas and ſix pounds, being uſually ſold for eight or ten rials. Yet for want of a market, though at ſo low a price, no more is ſown than is neceſſary for home conſumption; and thence a great part of the country lies fallow.

Here are vines of ſeveral kinds, and which vye with the wheat in exuberance. They are alſo, both with regard to the richneſs and flavour of their grapes, eſteemed beyond any produced in Peru. Moſt of them are red. A ſort of Muſcadel is alſo made here, whoſe flavour far exceeds any of the kind made in Spain. The grapes grow moſtly in eſpaliers, and not on detached vines. In this reſpect alſo, as in the wheat, large tracts of ground are totally neglected. For though its produce is ſo conſiderable, the buyers are ſo few, that the vineyards do not anſwer even the expence of cultivation.

The chief uſe made of theſe rich lands by the owners is, the fattening of oxen, goats and ſheep. And this is the principal employment of greateſt part of the inhabitants of the country of all ranks, and univerſally of the lower claſs. As ſoon as the horned cattle are fattened in theſe luxuriant paſtures, and the proper ſeaſon arrived, four or five hundred, and even more, according to the largeneſs of the farm, are ſlaughtered. They take out the fat, melt it into a kind of lard, there called Graſſa; and buccaneer or dry the fleſh in ſmoke; but the greateſt profit ariſes from the hide, the tallow, and the graſſa, a ſufficient proof of their prodigious fatneſs when killed. But an idea of the fertility of this country may be beſt formed from the value of a live beaſt, which, when fit to be killed, may be purchaſed for four dollars; a price vaſtly beneath that in any other part of India; and may be ſufficient to remove the unjuſt reproach of the poverty of this province. For were the induſtry of the people equal to the fertility of the ſoil, this kingdom would be the moſt opulent of any in America.

THE manner of ſlaughtering the beaſts render it a favourable diverſion to the perſons employed in performing it, and it muſt be owned that their dexterity is really ſurprizing. The cattle intended to be killed are drove into an incloſure. At the gate are the Guaſos on horſeback with their ſpears two or three toiſes in length, and at one end a very ſharp piece of ſteel in the form of a half moon, the points of which are about a foot diſtant from each other. Every thing being ready, the gate of the incloſure is opened, and a beaſt turned out, which naturally betakes itſelf to flight, but is immediately purſued by a Guaſo, who without checking his horſe hamſtrings it in one leg, and then immediately in the other. He then alights, and having diſpatched his capture, ſkins it, takes out the tallow, the fat for the Graſſa, and cuts up the fleſh for ſalting and drying. This done he wraps up the tallow in the hide, and loading it on his horſe, carries it to the farm; returning again for the fleſh. After this he ſets out on another expedition. Sometimes they turn out at once as many beaſts as there are Guaſos ready to kill them. And this is the daily exerciſe till all the cattle appointed for that year's ſlaughter are diſpatched. An European is ſurprized not only at their dexterity in hamſtringing the beaſt, when both are on full ſpeed, but alſo to ſee one man

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alone go through the whole work in ſuch a regular method and great diſpatch. If the beaſt be ſwifter than his horſe, the Guaſo has recourſe to his nooſe, and halters him by throwing it either about his neck, or round one or two of his legs, according as opportunity offers, and by that means ſecures him. Then if a tree be near at hand, he gives the end of the thong two or three turns round the trunk, and the whole difficulty of killing the beaſt is over.

The tallow is wrapt up in the hides, and in this manner carried to the city for ſale; the Graſſa is melted into bags of ſheep-ſkins; the fleſh, after being cut into thin ſlices, is ſalted, and this is what they call Taſſagear; afterwards it is buccaneered or dried in the ſmoke,* and ſold. The hides they tan, and make from them a moſt excellent leather, eſpecially for the ſoles of ſhoes.† Goats alſo as we have already obſerved, are fattened and turn to good account. Their tallow nearly reſembles that of the ox, and the Cordovan leather make of their ſkins ſurpaſſes every thing of that kind made in any part of the whole kingdom of Peru.

All other proviſions and grain are in the ſame plenty, turkeys, geeſe, and all kinds of poultry are ſold at a remarkable low price, great numbers of them being bred all over the country, with little care and no expence. Wild fowls alſo are very common, among which are canelones, and others deſcribed among the birds found in the deſarts of Quito, tho' theſe are not ſo large, and more like the bandarrias as they are there called. Here are alſo wood pigeons, turtle doves, partridges, ſnipes, woodcocks, and royal cirapicos, &c. And with regard to theſe, the air may be ſaid to vie with the fertility of the earth.

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* They dry it in the ſun, by which it attains a ruſty colour, and appears as though it had been dried in ſmoke. A.

† They tan thin leather with the bark of the mangrove tree. A.

Among the birds I muſt not omit one of a very ſingular kind, and found all over the country. The natives call theſe birds diſpertadores, awakeners, from their giving notice to others of the approach of any danger. On hearing the noiſe of the approach of any creature whether man or beaſt, or ſeeing them within a ſmall diſtance, they riſe from the ground, and make a loud chattering not unlike that of a magpye; continuing the noiſe, and flying about in the air over the object which cauſed the alarm. This is underſtood by the birds thereabouts, who immediately riſe, and by that means eſcape the danger.

This bird is about the ſize of a middling fowl, its plumage black and white, has a thick neck, the head ſomething large, erect, and beautifully adorned with a tuft of feathers; its eyes are large, ſharp and lively; its bill well proportioned, ſtrong, and a little curved. On the fore part of their wings are two ſpurs, about an inch in length, of a reddiſh tinct towards the root, and their points reſembling thoſe of a cock, being very hard and ſharp. Theſe are the weapons they make uſe of againſt the other birds, particularly thoſe of prey, as hawks, and others of that kind, which probably abound the more in this country, from the great variety of prey it affords them.

Among the ſinging birds is the goldfinch, in every particular reſembling thoſe of Spain, except a ſmall variation in its plumage. There are beſides others proper to this country, and met with in all the cold climates, particularly the piches, which are ſomething larger than ſparrows. They are of a brown colour, ſpotted with black, except their breaſt, which is of a moſt beautiful red, and ſome feathers of the ſame colour in their wings, intermixed with others of a bright yellow. Amidſt all the fertility of this country, the only inſects are the niguas or piques: and tho' ſome ſnakes are found in the fields and woods, their bite is not dangerous. Neither are the country peaſants under any apprehenſions from ravenous beaſts; ſo that nature may be ſaid to pour her treaſures on this country, without blending them with the uſual inconveniences.

The fruits which moſtly abound in Chili, are of the ſame kind as thoſe known in Europe; its cherries in particular are large, and of a fine taſte. The ſtrawberries are of two kinds, one called frutillas, and are larger than thoſe of Quito, wanting little of being equal to a hen's egg in magnitude. The other, which in ſize, colour and taſte, perfectly reſemble thoſe of Spain, grow wild, on the ſide of the eminences with which the plains are interſperſed. And here alſo grow all kind of flowers, without any other culture, than that of benign nature.

Among the remarkable herbs, of which many are medicinal, and others applied to divers uſes, is the panque, of great ſervice in tanning leather. It abounds every where, and grows to about four or five feet from the ground. The principal ſtem, which is of a ſoft ſubſtance, is betwixt four and five inches in diameter, and about two feet and a half in height, ſeparating there into ſeveral branches, bearing round, ſerrated, rough, and thick leaves, and ſo large that their diameter when full grown, is ſeldom leſs than a foot and a half, and ſometimes two feet. Before the plant is fit to be cut, when the leaves begin to turn red, the peaſants make an inciſion into the bark, and ſuck the juice which is very cooling and aſtringent; but as ſoon as ever the leaf is obſerved to turn white, an indication of decay, they cut the plant down at the root, take off the branches, and divide the ſtalk into ſhort pieces, which being dried in the ſun, make an excellent tan.

Besides this rich variety of productions, on the ſurface of the earth, the country alſo abounds with valuable mines and quarries; particularly of Lapis lazuli and loadſtone, copper equal to the beſt of Europe; beſides ſeveral of gold; but no advantage is derived from any; the inhabitants, contented with the plentiful enjoyment of all the neceſſaries of life, extend their wiſhes no farther, leaving to the curioſity and avarice of others, the laborious ſearch after what the earth contains in its bowels.

This kingdom of Chili ſeems alſo to have been the firſt country of thoſe famous horſes and mules, mentioned in the firſt volume. Indeed all theſe creatures found in America, owe their origin to ſome imported from Spain. At preſent, however, thoſe of Chili ſurpaſs not only thoſe of the other parts of America, but even thoſe of Spain, from whence they are derived. The horſes firſt brought over might poſſibly have been of the running kind, Spain ſtill abounding in that ſort. But it muſt be owned, that greater care has been taken here of preventing the breed from being mixed with others of a leſs generous ſpecies; and by this means they greatly exceed thoſe of Spain; for without any other incentive than their own inclination, before they will ſuffer any other to get before them, they will exert their utmoſt ſtrength; and at the ſame time their motion is ſo eaſy, that the rider is not the leaſt fatigued. In beauty and gracefulneſs they are not inferior to the famous Andeluſian horſes, and at the ſame time full of ſpirit. Accordingly they are every where ſo highly valued, that a more acceptable preſent cannot be made to a perſon of the greateſt diſtinction, than one of theſe beaſts. Many purchaſe them for parade, and beſides their being common all over the kingdom, they have been ſent even to Quito. The great demand for them, and conſequently their high price, has induced the inhabitants of ſeveral countries to attempt the breeding of them; but none are equal to thoſe of Chili.

The commerce at Conception might be conſiderably increaſed, were the country, which is far from being the caſe, inhabited in any proportion to its fertility and extent; but for want of a ſufficient number of hands, their commerce is at a very low ebb, conſiſting almoſt intirely in proviſions, wine, &c. and this is ſo ſmall, that it is chiefly carried on by only a ſingle ſhip coming once a year from Calloa to load with them, together with a few others trading to Chiloe or Baldivia, and in their return touch here. Their exports are tallow, graſſa, cordovan, bend leather, excellent butter, wines, and dried fruits. The goods brought hither in exchange are the ſeveral ſorts of woollen ſtuffs from Quito, and others from Europe, iron, and mercury. Very few European goods are however imported; for the people here not being remarkable for their riches, uſe only home made ſtuffs and bays, which tho' extremely good are in no great quantity. The commerce carried on between the inhabitants of Chili, and the Arauco Indians, ſhall be mentioned in its proper place.

CHAP. VI.

Deſcription of CONCEPTION BAY; *its roads or harbours, fiſh,* &c. *and the ſingular mines of ſhells in its neighbourhood.*

THE bay of Conception, beſides its excellent bottom, is of ſuch an extent, as not to be equalled by any on the whole coaſt. For from Tierra-Firma, north and ſouth, its length is nearly three leagues and a half, and its breadth from eaſt to weſt, almoſt three leagues, being the diſtance betwixt the harbour of Talcaguano, and the Cirillo virde, or little green mountain, ſituated near the city; from whence its breadth is contracted by the iſland of Quiriquina, which lying in the mouth of it, forms two entrances, of which that on the eaſt ſide is the ſafeſt, being two miles in breadth, and accordingly frequented by moſt ſhips. The weſt entrance is between the iſland and Talcaguano point, and is near half a league in breadth. In the principal entrance of this bay is thirty fathom water, which depth afterwards decreaſes to eleven and ten, till within about a mile of the ſhore, oppoſite to the entrance. The weſtern, though the many rocks and breakers in it make it appear very dangerous, has a channel with water ſufficient for the largeſt ſhip, the depth being at firſt thirty fathom, and never leſs than eleven; it is ſituated in the middle of the entrance, that is at an equal diſtance between the rocks which project about a quarter of a league from Talcaguano point, and Quiriquina.

WITHIN the bay are three roads or harbours, where ſhips anchor; for though the bottom be every where clear, it is only in one of theſe three places ſhips can ride in ſafety, being no where elſe ſheltered from the wind. The firſt called Puerto Tome, lies E. and W. with the N. point of Quiriquina, contiguous to the coaſt of Tierra Firma. The anchoring place is about half a league diſtant from the land, in about twelve fathom water. But this road is only uſed when ſhips come in during the night, it being difficult to reach either of the other two before day light, as ſeveral tacks muſt be made for that purpoſe.

IN this bay the principal port is that of Talcaguana. It is properly an elbow, and bears S. S. W. from the S. point of Quiriquina. This is by far the moſt frequented, ſhips in general anchoring here, having not only better ground than any other part of the bay, but are in ſome meaſure ſheltered from the N. winds. Whereas at Cirillo-verde, they lie expoſed, not only to theſe, but alſo to the S. winds, the land which ſhould intercept them being low. Beſides the bottom is of a looſe mud, ſo that the anchors in a hard gale of wind, generally come home; and conſequently the ſhips in great danger of being ſtranded on the coaſt. From theſe inconveniences it may be concluded, that the only ſhips which anchor here, are ſuch as happen to be in thoſe parts in the midſt of ſummer, and are in haſte to take in their loading, for which this road is moſt convenient, as being neareſt the city.

Two rivers empty themſelves into this bay, one of which paſſing through the city of Conception, has thence the ſame name; the other is called St. Pedro. The firſt is the watering place for ſhips anchoring at Cirillo Verde; whereas thoſe at Talcaguano, ſupply themſelves with that neceſſary fluid from ſome ſtreams which flow from the adjacent eminences; they eaſily take on board a ſufficient quantity of wood, of which there is here plenty; as of all other neceſſaries.

Ships, before they enter the bay of Conception, endeavour to make the iſland of Santa Maria, and then coaſt along it, keeping at the ſame time, a good look out for a reef of rocks which ſtretches out almoſt three leagues from the N. W. point; thence they continue their courſe, keeping at a little diſtance from the main, there being no rocks but what are above water. After weathering the real of rocks on the iſland of Santa Maria, they ſteer directly for Talcaguano point, at the diſtance of about half a league; from which ſeaward, is a rock called Quiebraollas, which muſt be the more carefully avoided as it is ſurrounded with ſhoals. There is, however, no danger, if the ſhip be not nearer than half a mile; indeed there is a ſufficient depth of water within a cable's length. After their being abreaſt of this rock they ſteer for the N. point of Quiriquina, off which lie two rocks, but the fartheſt from the ſhore is only a quarter of a league, and may be ſafely approached within a ſtone's caſt. Both theſe rocks ſwarm with ſea-wolves; and as there is

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a ſufficient depth of water all round them, there is no other danger in ſtanding near them, than what may be ſeen. There is indeed a neceſſity for ſtanding near them, to avoid falling to leeward of the bay. After paſſing them, the courſe is continued as near as poſſible to the iſland of Quiriquina, taking care to avoid ſome other rocks lying along the ſhore.

As ſhips are generally obliged to make ſeveral tacks in order to get into Conception-bay, care muſt be taken not to approach too near the iſland of Quiriquina, either on the E. or S. ſides; for though the coaſt is bold on the N. and N. W. ſides, there is a ſhoal on the S. extending to a conſiderable diſtance from the ſhore. At a third part of the diſtance between the road at Talcaguano, and the point of the ſame name, is another ſhoal, running about half a league to the eaſtward. In the middle of it is a ledge of rocks, whoſe tops are dry at low water. To avoid this ſhoal, tho' the thick water ſufficiently indicates it, the beſt way is, at entering the mouth of the bay with a land wind, to ſteer directly for the middle of a ſpot of red earth on a mountain of a middling height, ſituated at the bottom of the bay, continuing this courſe till the ſhip is paſſed the ſhoal; and then ſteer directly for the houſes at Talcaguana, till within about half a mile from the ſhore, which is the uſual anchoring place in five or ſix fathom water; Cape Herradura being covered by the iſland of Quiriquina. The ſame care is alſo neceſſary to avoid another reef of rocks, lying between the Morro and the coaſt of Talcaguana; nor muſt the Morro ſide be approached too near, there being a ſand ſtretching all along from that reef of rocks to Cirillo Verde. The ſhips riding at Talcaguana in the manner thus preſcribed, are ſheltered from the N. wind; but not entirely ſo from the ſea, which in thoſe winds runs very high, and pours in through both entrances. The goodneſs of the bottom, however, ſecures the ſhip. During the force of theſe winds there is no poſſibility of landing on account of the great ſea; but in fair weather, every place is convenient for going on ſhore.

THE country round the bay, particularly that between Talcaguana and Conception, within four or five leagues from the ſhore, is noted for a very ſingular curioſity, namely, that at the depth of half or three quarters of a yard beneath the ſurface of the ground, is a ſtratum of ſhells of different kinds, two or three toiſes in thickneſs, and in ſome places even more, without any intermixture of earth, one large ſhell being joined together by ſmaller, and which alſo fill the cavities of the larger. From theſe ſhells all the lime uſed in building is made; and large pits are dug in the earth for taking out thoſe ſhells, and calcining them. Were theſe ſtrata of ſhells found only in low and level places, this phænomenon would be more eaſily accounted for by a ſuppoſition no ways improbable, namely, that theſe parts were formerly covered by the ſea, agreeable to an obſervation we made in our deſcription of Lima. But what renders it ſurprizing is, that the like quarries of the ſame kind of ſhells, are found on the tops of mountains in this country, fifty toiſes above the level of the ſea. I did not indeed perſonally examine the quarries on the higheſt of thoſe mountains; but was aſſured of their exiſtence by perſons who had lime kilns there; but I ſaw them myſelf on the ſummits of others at the height of twenty toiſes above the ſurface of the ſea; and was the more pleaſed with the ſight, as it appeared to me a convincing proof of the univerſality of the deluge. I am not ignorant that ſome have attributed this to other cauſes; but an unanſwerable confutation of their ſubterfuge is, that the various ſorts of ſhells which compoſe theſe ſtrata both in the plains and mountains, are the very ſame with thoſe found in the bay and neighbouring places. Among theſe ſhells are three ſpecies very remarkable: the firſt is called Choros, already mentioned in our deſcription of Lima; the ſecond is called Pies de Burros, aſſes feet; and the third Bulgados, and theſe to me ſeem to preclude all manner of doubt that they were originally produced in that ſea, from whence they were carried by the waters, and depoſited in the places where they are now found.

I HAVE examined theſe parts with the cloſeſt attention, and found no manner of veſtige of ſubterraneous fires. No calcinations are to be met with on the ſurface of the earth, nor among the ſhells; which, as I have already obſerved, are not intermixed with earth; nor are there ſtones, or any other heterogeneous ſubſtances found among them. Some of theſe ſhells are entire, others broken; as muſt naturally happen in ſuch a cloſe compreſſion of them, during ſo long an interval of time. This circumſtance, however trifling it may appear to ſome, may deſerve the conſideration of thoſe who have advanced the notion, that ſhells may be formed in the earth by ſubterraneous fires, co-operating with the nature of the ſoil.

THE Pie de Burro, has its name from the fiſh incloſed in it, reſembling, when taken out, the foot of an aſs. This fiſh is of a dark brown colour, firm and filaceous; it is an univalve, its mouth almoſt circular, and its diameter about three inches. The bottom of the ſhell is concave within, and convex without. The colour within is perfectly white, the ſurface very ſmooth; the outſide ſcabrous and full of tubercles. Its thickneſs in every part is about four or five lines; and being large, compact, and heavy, is preferred to all others for making lime.

THE bulgados, in the Canaries called bulgaos, are ſnails, not at all differing in their form from the common; but larger than thoſe of the ſame name found in gardens, being from two inches, to two inches and a half in diameter. The ſhell is alſo very thick, rough on the outſide, and of a dark brown colour; and, next to the preceding, makes the beſt lime.

All theſe ſpecies of ſhell-fiſh are found at the bottom of the ſea in four, ſix, ten and twelve fathom water. They are caught by drags; and what is very remarkable is, that no ſhells, either the ſame, or that have any reſemblance to them, are ſeen either on the ſhores continually waſhed by the ſea, or on thoſe tracks which have been overflowed by an extraordinary tide. They adhere to a ſea plant, called Cochayuyo lake herb, the Indians making no nominal diſtinctions between the inland lakes, and the ſea, calling both cochas. This plant reſembles the bejuco; its diameter is about half an inch, and from its root to its extremity of an equal thickneſs. In length is from twenty to thirty toiſes, producing at every eighteen inches, or ſomething more, a leaf about a yard and a half, or two yards in length; but the breadth, which is in every part the ſame, does not exceed two or three inches. It is remarkably ſmooth, which, together with a viſcid liquor, with which it is covered, gives it a very fine gloſs. The ſame may be ſaid of the ſtem, which is extremely flexible, and ſtrong. Its colour is of a pale green, but that of the leaves more vivid. This plant divides itſelf into ſeveral branches, equal in dimenſions to the main ſtem. Theſe branches ſucceſſively produce others of the ſame proportion; ſo that the produce of one ſingle root covers a prodigious ſpace. At the joints where the branches ſpring, are found this kind of ſhell-fiſh, where they both receive their nouriſhment, and propagate their ſpecies. The extremities of theſe Cochayuyos, float on the ſurface, and in ſome lakes, where the water has remained a long time undiſturbed, form a kind of carpet. At the junction of the ſtalk of every leaf with the ſtem, is a berry reſembling a caper, but ſomething larger, ſmooth and gloſſy on the ſurface, and exactly of the ſame colour with the ſtem.

The ſeas on theſe coaſts abound in excellent fiſh, though not in ſo great a degree as thoſe near Juan Fernandes. Here are ſeen, in particular, a great number of whales, which come even into the bay; alſo tunny-fiſh, and ſea wolves. Among the amphibious creatures here is one known all along theſe coaſts, and even at Callao. It is called Pajaro Nino, the bird-child. It in ſome parts reſembles a gooſe, except that its neck and bill are not arched, and is ſomething larger. It has a thick neck, a large head, and a ſtrong ſhort bill. Its legs very ſmall, and in walking the body is in an erect poſition. Its wings are ſmall, cartilaginous, and nearly reſemble the fins of the ſeal. Its tail is ſo ſmall as hardly to be diſtinguiſhed; its wings and whole body are covered with a ſhort brown hair like that of the ſea-wolves, and generally full of white ſpots, tho' ſome are of other colours. So that upon the whole, the bird makes no diſagreeable appearance. It lives promiſcuouſly either in the water or on the land; on the latter it is eaſily taken, being very ſlow in its motions; but when attacked, bites ſeverely, though it is obſerved never to be the firſt aggreſſor.

CHAP. VII.

Deſcription of the City of SANTIAGO, *the Capital of the Kingdom of* CHILI.

AFTER giving an account of all the cities and places of note, through which we paſſed, I muſt not omit the capital of the kingdom of Chili. We had not indeed occaſion to viſit it perſonally; but by the informations we received from perſons beſt qualified to anſwer our inquiries, in the ports of its juriſdiction, to which our affairs called us more than once, we are enabled to gratify the curioſity of a rational reader.

The city of Santiago, originally called Santiago de la Nueſtra Eſtremadura, was founded by captain Pedro de Valdivia, who began the foundation on the 24th of February 1541, in the valley of Mapocho, near that of Chili, which gives its name to the whole kingdom. It has not been ſubject to the revolutions of other places, but ſtill ſtands on its original ſpot, which is nearly in 33° 40′ ſouth latitude, and about twenty leagues from the harbour of Valparaiſo, the neareſt port to it in the South Seas. Its ſituation is one of the moſt convenient and delightful that can be imagined, ſtanding in a delightful plain of twenty-four leagues in extent, watered by a river flowing in meanders through the middle of it, and called by the ſame name of Mapocho. This river runs ſo near the city, that by means of conduits, the water is conveyed from it through the ſtreets, and alſo ſupplies the gardens, which few houſes here are without, and hence the delightful ſituation of the place, and the pleaſure of the inhabitants are greatly heightened.

The city is a thouſand toiſes in length from E. to W. and ſix hundred in breadth from N. to S. On the ſide oppoſite the river, which waſhes the N. part of it, is a large ſuburb, called Chimba; and on the E. ſide, almoſt contiguous to the houſes, is a mountain of a middling height, called Santa Lucia. The ſtreets are all of a handſome breadth, paved and ſtreight; ſome run exactly in an E. and W. direction, and are croſſed by others, lying exactly N. and S. Near the middle of the city is the grand piazza, which, like that of Lima, is ſquare, with a very beautiful fountain in the center. On the N. ſide are the palace of the royal audience, where the preſidents have their apartments, the town-houſe, and the public priſon. The W. ſide is taken up by the cathedral and the biſhop's palace. The S. ſide conſiſts of ſhops, each decorated with an arch; and the E. is a row of private houſes. The other parts of the city are divided into inſulated ſquares of houſes,

regular,

regular, and of the ſame dimenſions with thoſe of Lima.

The houſes here are built of adoves, or unburnt bricks, and very low; this neceſſary caution againſt the terrible devaſtation of earthquakes being equally neceſſary here as in all other towns of Peru, calamities with which this city has been often viſited; but the moſt remarkable are the following.

1. In the year 1570, an earthquake happened, which overflowed ſeveral mountains in this kingdom; many villages were entirely deſtroyed, and great part of the inhabitants buried in their ruins.

2. In the year 1647, on the 13th of May, many of the houſes and churches of this city were ruined by another ſhock.

3. In 1657, on the 15th of March, the earth was obſerved to have a tremulous motion for the ſpace of a quarter of an hour, and few of the buildings in the city were left ſtanding.

4. In 1722, on the 24th of May, great part of the houſes were damaged by another earthquake.

5. In the year 1730, on the 8th of July, happened that tremendous earthquake already mentioned in our account of Conception. This ſhock not only ruined the greateſt part of the city, but concuſſions were often felt for many months afterwards; and this cataſtrophe was ſucceeded by an epidemical diſtemper, which ſwept away even greater numbers than had before periſhed by the earthquake.

Notwithstanding the houſes are low, they make a handſome appearance, and are well contrived both for pleaſure and convenience.

Besides the cathedral and the pariſh church of the Sagrario, here are two others, namely, that of St. Anne, and St. Iſadoro. There are alſo three convents of St. Franciſco, San Diego, a college for ſtudents, and, without the city, a convent of Recollects; two of Auguſtines, one of Dominicans, one of the Fathers of Mercy, one of St. Juan de Dios, and five colleges of Jeſuits, namely, St. Michael, the Noviciate, St. Paul, St. Xavier, a college for ſtudents, who wear a brown cloak, and a red ſcarf, and the college, called La Olleria, for the exerciſes of St. Ignatius. Here are alſo four nunneries, two of St. Clare, two of Auguſtines, and one of Carmelites, and a religious ſiſterhood, under the rules of St. Auguſtine. All which have a large number of recluſes, as is common in all the cities of Peru. The churches of the convents, beſides being very ſpacious, are built either of brick or ſtone, and thoſe of the Jeſuits are diſtinguiſhed by the beauty of their architecture. The pariſh churches are in every reſpect greatly inferior to them.

The inhabitants of Santiago are computed at about four thouſand families, and of theſe nearly one half are Spaniards of all degrees; and among them ſome very eminent both for rank and opulence. The other moiety conſiſts of Caſts and Indians, but chiefly of the latter.

The cuſtoms here differ very little from thoſe already mentioned in our account of large cities. They are not ſo negligent in the care of their apparel as at Conception; and inſtead of the oſtentation of Lima, they follow the modeſt decency of Quito. The men, except on ſome particular ceremonies, generally wear ponchos, and all the families who can any way afford it, keep a calaſh for driving about the city. The men are robuſt, of a proper ſtature, well ſhaped, and of a good air. The women have all the charms of thoſe of Peru, and are rather more remarkable for the delicacy of their features, and the fineneſs of their complexions; but they disfigure their natural beauty by a miſplaced art, painting themſelves in ſuch a prepoſterous manner, as not only to ſpoil the natural delicacy of their ſkin, but even their teeth; ſo that it is very rare to ſee a woman here of any age with a good ſet.

In this city is a royal audience, removed hither from Conception. It conſiſts of a preſident, four auditors, and a fiſcal, together with another officer dignified with the endearing title of patron of the Indians. The determinations of this court are without appeal except to the ſupreme council of the Indies, and this is only in matters of notorious injuſtice, or denial of redreſs.

THE preſident, though in ſome particulars ſubordinate to the Vice-roy of Lima, is alſo governor and captain general of the whole kingdom of Chili; and, as ſuch, he is to reſide one half of the year at Conception, and the other at Santiago. During his abſence from the laſt city, the corregidor acts as his repreſentative; and his juriſdiction, on this occaſion, extends to all the other towns, except the military governments.

THE magiſtracy, at the head of which is the corregidor, conſiſts of regidores, and two ordinary alcaldes. In theſe are lodged the police, and civil government of the city; and during the time the preſident reſides here, the juriſdiction of the corregidor is limited to the liberties of Santiago.

THE office for the royal revenue, is directed by an accountant and treaſurer; where are paid the tributes of the Indians, and other parts of the revenue; the ſalaries of officers within its department, and other aſſignments.

THE chapter of the cathedral conſiſts of the biſhop, dean, archdeacon, chantor, four canons; and other ſubordinate eccleſiaſtics.

HERE is alſo a tribunal of Croiſade, the members of which are a ſubdelegate commiſſary, an accountant, and treaſurer. Likewiſe a commiſſion of inquiſition, all the officers of which are appointed by the tribunal of inquiſition at Lima.

THE temperature of the air at Santiago is nearly the ſame with that of Conception. The luxuriancy of ſoil, and exuberance of all kinds of proviſions, the commerce, and other neceſſary particulars, I ſhall mention in the following account of the kingdom of Chili.

CHAP. VIII.

Account of that part of Chili *within the juriſdiction of the audience of* Santiago.

THE kingdom of Chili extends from the frontiers of Peru to the ſtreights of Magellan, the diſtance being five hundred and thirty leagues. Theſe two kingdoms, as I have mentioned in another place, are ſeparated by the deſart of Atacamo, which extends eighty leagues between the province of the ſame name, being the laſt of Peru, and the valley of Copoyapu, now corruptly called Copiapo, the firſt in Chili, and in every particular reſembles the deſart of Sectura. Eaſtward, ſome parts of this kingdom terminates on the frontiers of Paraguay, though ſome uninhabited deſarts intervene; and others border on the government of Buenos Ayres. Though between theſe are the Pampas or extenſive and level plains. Its weſtern boundary is the ſouth-ſea, extending from 27 degrees nearly, the latitude of Copiapo, to 53° 30′. But to confine ourſelves to the true extent of this kingdom, as inhabited by the Spaniards, it begins at Copiapo, and terminates at the large iſland of Chiloe, the ſouthern extremity of which is in 34° of S. latitude; and its extent from W. to E. is the diſtance between the Cordillera, which is here of a ſtupendous height, and the coaſt of the ſouth-ſea; that is, about thirty leagues.

Part of the country which at preſent compoſes the kingdom of Chili, was ſubjected to the empire of the Yncas by Yupanqui, the tenth emperor; who, incited by the inchanting account given of theſe provinces, undertook the conqueſt of them; and proſecuted the enterprize with ſuch ſucceſs, that he ſubdued the ſeveral nations inhabiting the valleys of Copoyapu or Copiapo, Coquimpu or Coquimbo, and Chili. But in his intended career ſouthward, the victorious Ynca met with an unſurmountable difficulty from the Purumauco Indians, and other nations, whom the rapidity of his conqueſts had induced to oppoſe him by a general confederacy. Thus he found himſelf under a neceſſity of deſiſting, after having carried his arms as far as the river Mauli, which is in the latitude of 34° 30′.

After the Spaniards had undertaken a deſcent in Peru, and made themſelves maſters of its ſeveral provinces, the marſhal Don Diego de Almagro was commiſſioned for the conqueſt of Chili. Accordingly he marched from Cuſco at the beginning of the year 1535, and after loſing the greateſt part of his Indians, and a conſiderable number of Spaniards, who periſhed with cold in paſſing over the Cordillera Nevada, he arrived at Copiapo, where the Indians, without trying the chance of war, ſubmitted. Animated with ſuch unexpected puſillanimity, he proceeded to the conqueſt of other nations; even ſuch as never had acknowledged the Yncas. And though he here met with a more warlike people, who were determined to ſell their liberty dear, he carried on the war proſperouſly. But his majeſty, in conſideration of his great ſervices, performed with ſo much hazard, having conferred on him the government of a territory a hundred leagues in length, ſouth of that which belonged to the marquis Don Franciſco Pizarro, a difference aroſe between theſe two great men, with regard to the boundaries of their reſpective governments. Almagro, impatient to take poſſeſſion, and pretending that the city of Cuſco ought to be included in his government, the conqueſt was ſuſpended, and he himſelf haſtened to that city, where inſtead of being inveſted

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with the chief command, he fell a ſacrifice to the jealouſy of Hernando Pizarro, who endeavoured to conceal his irregular proceedings under the veil of juſtice.

In the year 1541, the conqueſt of Chili was again ſet on foot, and the marquis Pizarro conferred the command on Pedro de Valdivia, together with the title of general. Accordingly he marched into the country, and founded moſt of the principal towns, and villages in it. So that in the year 1548, he was promoted to the government of it, by the preſident of Peru. In the proſecution of the conqueſt of theſe provinces, he had many ſharp ſkirmiſhes with the natives, till at laſt, in the year 1553, bravely oppoſing a general revolt, with a very inferior force, he fell, fighting with the greateſt intrepidity, at the head of his troops, the greateſt part of whom, enraged at loſing ſo brave a man, choſe to periſh with him rather than ſave themſelves by flight. His name, beſides the figure it makes in hiſtory, is ſtill preſerved in this country in the town of Valdivia, which he founded.

The martial genius of the Indians of this kingdom, conſiderably retarded the reduction of it; and has always been the chief cauſe why the Spaniſh ſettlements here, are ſo little proportional to the extent, fertility and riches of the country. Accordingly the captain-generalſhip of this vaſt kingdom has only four particular governments, and eleven juriſdictions; which are the following.

Particular governments in the kingdom of Chili.

I. The major-generalſhip of the kingdom of Chili.
II. Valparaiſo.
III. Valdivia.
IV. Chiloe.

Juriſdictions in the kingdom of Chili.

I. Santiago.
II. Rancagua.
III. Colchagua.
IV. Chillan.
V. Aconcagua.
VI. Melipilla.
VII. Quillota.
VIII. Coquimbo.
IX. Copiapo,

IX. Copiapo, & Guaſco. X. Mendoza.
XI. La Conception.

I. To the major-generalſhip of the kingdom of Chili, belongs the military government of the frontier towns and fortreſſes. Theſe are Arauco, the ſtated reſidence of the general, Santajuana, Puren, Los Angeles, Tucapel, and Yumbel. It will be here neceſſary to obſerve, that not above five leagues ſouth of Conception bay, the ſea receives a river called Biobio, both the ſouth banks and head of which are inhabited by wild Indians: and to prevent their incurſions, ſtrong forts have been erected along the banks, and are always well garriſoned and furniſhed with all kinds of military ſtores. Among theſe on the ſouth banks of the river is the fort of Arauco, and the others at a proper diſtance eaſtward to the mountain of Tucapel. Thus all attempts from theſe Indians is precluded, and the Spaniſh ſettlements protected from their depredations. The general is obliged to viſit theſe forts from time to time, carefully inſpecting into their condition, and, in caſe of neceſſity, to haſten to their relief. During his abſence, the commanding officer of each is the captain of the garriſon, which uſually conſiſting both of horſe and foot with their officers, the perſon on whom the command devolves is previouſly nominated. This important poſt is in the diſpoſal of the preſident, as ſuppoſed to be beſt acquainted with the merits of the ſeveral competitors when a vacancy happens; and that the ſafety of his government will induce him to prefer the moſt deſerving. Accordingly whoever intends to offer himſelf a candidate for this poſt, ſhould ſolicit to be employed in the frontier ſervice, procure a competent knowledge of the ſtratagems of the Indians, and be very attentive to diſtinguiſh himſelf on any alarm, or encounter. It is indeed expreſſed in the royal commiſſion, that the corregidor of Conception, ſhall be the military commander in chief; and, conſequently, it is to him that the appointment of the general properly belongs; but this, from very powerful reaſons, is diſpenſed with, the proper diſcharge of theſe two poſts, being utterly incompatible; and the civil and military requiſite here very rarely meeting in the ſame perſon. But when this obſtacle does not exiſt, and the corregidor is one of theſe extraordinary perſons, the preſident, agreeable to the royal expreſſion, confers the poſt of Maeſtre de campo on the corregidor of la Conception.

II. Valparaiso is the ſecond military government. But the particular account of it, I ſhall refer for a more proper place.

III. Valdivia has a military governor nominated by the king. Here is alſo a good body of troops, both for garriſoning the place, and the forts built to defend the entrance of the river and harbours in it. Cloſe to the river ſtands the town, the inhabitants of which are chiefly whites or Meſtizos; but a village forming a kind of ſuburb is inhabited by friendly Indians. This government has undergone ſome viciſſitudes in point of ſubordination, being ſometimes independent of the preſidents of Chili, and immediately ſubject to the Vice-roy of Lima; and at other times a part of the former. At laſt, on weighing the difficulties for providing for any ſudden exigence, or having a watchful eye over its neceſſary concerns at ſo great a diſtance as Lima, it was annexed to the juriſdiction of the preſident of Chili, as being nearer at hand to ſee that the forces are always on a good footing, and conſtantly in a proper poſture of defence.

IV. Chiloe has a military governor, who reſides at Chacao, the principal harbour of the iſland, being well fortified and capable of making a good defence. Beſides Chacas, which has the title of a city, is another place much larger, called Calbuco, where reſides a corregidor, who is nominated by the preſident of Chili. It has alſo regidores and alcaldes choſen annually. Beſides the pariſh church here, is a convent of Franciſcans, another of the Fathers of Mercy, and a college of Jeſuits. The iſland is every where well peopled with Spaniards, Meſtizos, and chriſtian Indians.

THE kingdom of Chili has continually a body of regular troops, conſiſting of five hundred men, for garriſoning Valparaiſo, a fort at Conception, and thoſe on the frontiers. One half of this body is infantry and the other cavalry. Under the major general who commands in chief is a ſerjeant major, whoſe duty it is to render them expert in all the various parts of military exerciſe; and that he may more conveniently render them ready at their ſeveral evolutions, he reſides at the fort of Jumbal, which lies in the center of the others. To theſe alſo belong a commiſſary general of the horſe, whoſe poſt is at Arauco, and in the abſence of the general has the command. Theſe troops have alſo a muſter-maſter general, who reſides at Conception. The ſtanding forces of Chili, till the beginning of this century, conſiſted of two thouſand men; but the great charge of ſupporting ſuch a body of troops, occaſioned them to be reduced to the preſent number.

THE produce of the revenue offices at Santiago and Conception, not being ſufficient to defray the expences of even this ſmall body, a remittance of 100,000 dollars, is every year ſent from Lima, half in ſpecie, and half in cloaths, and other goods. But ſix or eight thouſand is annually deducted out of this ſum for repairing the forts of the frontiers, and making preſents to the deputies of the Indians who attend at conferences, or to ſatisfy thoſe who complain to the preſident of injuries received.

VALDIVIA alſo receives from the treaſury of Lima, an annual ſupply of 70,000 dollars, 30,000 in ſpecie, the value of thirty thouſand in clothes for the ſoldiers, and 10,000 in ſpecie, which is paid to the king's officers at Santiago, in order to purchaſe flour, charqui, graſſa, and other neceſſaries for the garriſon at Valdivia. Theſe remittances are conveyed in ſhips which ſail from Valparaiſo.

I. The juriſdiction of Santiago we have already obſerved to be limited to its boundaries.

II. Rancagua is a juriſdiction in the country, and owes its name from the inhabitants living in ſingle houſes, without the appearance of a village, every family in their lonely cottage, four, ſix, or more leagues from each other. It is not, however, without a kind of capital, conſiſting of about fifty houſes, and between fifty and ſixty families, moſt of them Meſtizos, though their caſts is not at all perceivable by their complexion. The whole juriſdiction may contain about a thouſand families, Spaniards, Meſtizos, and Indians.

III. Colchagua reſembles in every circumſtance the former, except its being better peopled; its inhabitants according to the beſt computations, amounting to fifteen hundred families.

IV. Chilan is a ſmall place, but has the title of city, the number of families, by an accurate calculation, not exceeding two or three hundred, and having few Spaniards among them.

V. Aconcagua is a very ſmall place at the foot of the mountains, but the country is interſperſed with a great number of ſingle houſes. The valley of the ſame name is ſo delightful, that a town called Phelipe le Real, was built in it in 1741.

VI. Melipilla made no better figure than the foregoing juriſdictions, till the year 1742, when a town was erected in it by the name of St. Joſeph de Longronno.

VII. Quillota. The town of this name does not contain above a hundred families; but thoſe ſcattered over the country exceed a thouſand.

VIII. COQUIMBO, or la Serena, according to father Feville, ſtands in 24° 54′ 10″ ſouth latitude. This was the ſecond town built in the kingdom of Chili, in 1544, by Pedro de Valdivia, with a view of ſecuring the intercourſe between Peru and Chili, for the more convenient ſupply of what ſuccours might be wanted; and at the ſame time, for ſecuring the fidelity of the Indians who lived in that valley. This place is ſituated in the valley of Cuquimpo, from whence it received its original name; but Valdivia gave it that of la Serena, from an affection to the province of that name in Spain, and of which he was a native. It ſtands about a quarter of a league from the coaſt of the ſouth-ſea in a moſt delightful ſituation, having an extenſive proſpect of the ſea, the river, and the country, which preſents the ſight with a charming variety of fields of different kinds of grain, and woods of a lively verdure.

THIS town is of itſelf large, but not proportionally peopled: the number of families not amounting to above four or five hundred, conſiſting of Spaniards, Meſtizos, and a few Indians. The ſtreets are ſtrait and of a convenient breadth, ſome of which lying N. and S. and others interſecting from E. to W. the town conſiſts of ſquares of buildings, like Santiago, and other places of note in this part of America. The houſes are all of mud walls, and covered with leaves; but none are without a large garden, well planted with fruit trees and eſculent vegetables, both thoſe of America and Spain; for the climate is happily adapted to a variety of both kinds, the heats not being exceſſive, nor the colds ſevere; ſo that both in the fertility of the earth, and the chearful appearance of the country, the whole year wears an aſpect of one perpetual ſpring. The ſtreets, though regular and convenient as abovementioned, are not entirely formed by the houſes, parts of the intervals between the ſeveral ſquares being filled up with gardens; and moſt of them have ſo charming an appearance, as to atone for the mean aſpect of the houſes.

Besides pariſh churches, here is a Franciſcan, a Dominican, and an Auguſtine convent; one belonging to the Fathers of Mercy, another to St. Juan de Dios; and a college of Jeſuits. The churches of theſe religious fraternities are large and decent. The pariſh church occupies part of one ſide of the great ſquare; and oppoſite is the town-houſe, where the alcaldes and regidores meet, who with the corregidor form the corporation.

On the N. ſide of Coquimbo runs the river, after flowing in various meanders thro' the whole valley of the ſame name; and by canals cut from it, furniſhes the town with water, one great uſe of which is to preſerve the beauty of their gardens.

IX. Copiapo is about twelve leagues from the ſea-coaſt, very irregularly built, but contains between three and four hundred families. The ſea-port neareſt to it is that known by the ſame name. There is indeed another port in this juriſdiction; but it lies thirty leagues farther to the S. and conſiſts only of a few huts.

X. Mendosa. The town of this name is ſituated on the eaſtern ſide of the Cordillera, at the diſtance of about fifty leagues from Santiago. It ſtands on a plain, and is decorated with gardens in the ſame manner as Coquimbo, and the place being well ſupplied with water by means of canals, no care is wanting to keep them in their greateſt beauty. The town conſiſts of about an hundred families, half Spaniards or whites, and the other half caſts. It has beſides a decent pariſh church, a Franciſcan, Dominican and Auguſtine convent, together with a college of Jeſuits. This juriſdiction has alſo two other towns, that of St. Juan de la Frontera, likewiſe to the eaſtward of the Cordillera, and about thirty leagues N. of Mendoza, and St. Luis de Loyala, about fifty leagues eaſtward of Mendoza. The latter however is mean and ſmall, not containing above twenty-five houſes, and fifty or ſixty families, Spaniſh and caſts; tho' many more are ſcattered up and down the neighbouring country. In ſuch a ſmall place it is ſomething remarkable to ſee a pariſh church, a dominican convent, and a college of Jeſuits. Here the preſidents of Chili are received as governors of it, in their way to Chili from Buenos Ayres, this being the firſt place in their government on that ſide. The town of St. Juan de la Frontera is, in every reſpect, equal to Mendoza itſelf.

XI. The juriſdiction of Conception is the laſt; but having already given an account of it, I ſhall proceed to conſider the commerce carried on by the kingdom of Chili with Peru, Buenos Ayres, Paraguay, and its own towns; and ſubjoin an account of that carried on with the wild Indians bordering on it, with the manner of maintaining a harmony with theſe ſavage people. In the mean time I ſhall conclude this chapter with obſerving, that the corregidors of the whole juriſdiction are nominated by the king, except thoſe of Rancagua, Melepilla, and Quillota, who are appointed by the preſident of Chili. This is indeed the caſe of all the others, when a corregidor happens to die, before a perſon is nominated to ſucceed him; but the office of theſe corregidors being only for five years, the prolongation muſt be by his majeſty's expreſs order. The inhabitants are formed into companies of militia, and every one knows the place of arms to which he is to repair on any alarm. Thus to Valparaiſo belongs the companies of militia of Santiago, Quillota, Melipilla, Aconcagua, and Rancagua; and theſe in all amount to between two or three thouſand men, and are formed into troops and companies.

nies. Rancagua, when Santiago and Colchagua are threatned, is alſo to ſend ſuccours thither; and the ſame duty lies on Chillan with regard to Conception. In theſe caſes notice is conveyed with ſuch diſpatch, that they are ſpeedily at their rendezvous, all they have to do, being to mount their horſes and repair to their ſtation with the uſual pace uſed in that country, which is always a gallop; and thus the militia of this country may be ſaid to ride poſt to the parts where danger calls them.

CHAP. IX.

Commerce of CHILI. *Methods uſed to keep up a good Harmony with the wild Indians.*

IN my deſcription of the city of Conception, I mentioned the inchanting beauties of the neighbouring countries; and the exuberant returns of nature for the huſbandman's toil. The like profuſion of natural productions is ſeen all over this kingdom. Its plains, eminences, valleys, in ſhort the whole country to the ſmalleſt portion of ground is an object of admiration. Every particle of earth, in this amazing fertility, ſeems transformed in ſeed. The country round Santiago, as it is not inferior in pleaſantneſs and fertility to that of Conception; ſo alſo from the great affinity to the climates, its products are nearly the ſame. Accordingly ſome farmers wholly apply themſelves to corn, others to fattening of cattle; ſome confine themſelves to the breeding of horſes, and others to the culture of vines and fruit trees. The firſt find their account in plentiful harveſts of wheat, barley, and particularly in hemp, which thrives here ſurprizingly, and ſurpaſſes thoſe of the former. The ſecond at their large ſlaughters, have great quantities of tallow, graſſa, charqui, and ſole leather tanned. Of the goat ſkins is made Cordovan leather; ſome tallow is alſo procured from thoſe creatures. Wines are made here of ſeveral ſorts, and tho' not ſo excellent as thoſe of Conception, they are very palatable and of a good body; brandy is alſo diſtilled from them. Theſe are the principal articles of the active commerce of this kingdom with Peru, which it ſupplies with wheat, tallow, and cordage; and by the moſt careful eſtimate, the quantity of wheat ſent annually from Santiago to Callao, amounts to 140,000 Tanegas, each weighing one hundred and fifty-ſix pounds; about eight thouſand quintals of cordage; and between ſixteen and twenty thouſand quintals of tallow: beſides ſole leather, nuts, filberts, figs, pears, and apples; Graſſa, Charqui, and neat tongues: the three laſt being no inconſiderable articles.

The more northern parts of the kingdom, as Coquimbo, produce olives, the oil of which is preferable to that of many parts of Peru; but being a natural commodity of that kingdom, and conſequently, not an article of exportation, is conſumed at home. The country about Santiago, likewiſe, produces good olives; but in no great quantity, the genius of the inhabitants having not hitherto led them to make large plantations of thoſe trees.

Besides the commerce carried on with Peru in proviſions, there is that of metals, this kingdom abounding in mines of all kinds, but principally of gold and copper, which we ſhall briefly conſider.

The moſt famous gold mine known in Chili, is called Petorca, and lies in a country E. of Santiago. This gold was formerly highly eſteemed, and found in great plenty; but now on account of a whitiſh tinge, the value of it is conſiderably diminiſhed. This mine for the length of time it has been worked, is equal to the moſt celebrated in Peru.

In the country of Yapel, which is ſituated in the ſame quarter, but farther to the northward along the Cordillera, are alſo rich gold mines, and the metal twenty-three carats fine. In 1710, in the mountains of Lumpanqui near the Cordillera, were diſcovered mines of gold, ſilver, copper, lead, tin, and iron, the gold between twenty-one and twenty-two carats fine; but the working from the hardneſs of the ſtone, where, according to the miner's phraſe, "the metal arms," was very difficult and laborious. This inconvenience does not however occur in the mountain Llaoin, where the ſtone is ſoft, and not leſs rich in metal, equal in fineneſs to the former. Beſides theſe there are other gold mines, worked with good ſucceſs at Tiltil, near Santiago.

Betwixt Quillota and Valparaiſo, in a part called Ligua, is a very rich gold mine, and the metal greatly eſteemed. Coquimbo, Capiapo, and Guaſco, have alſo gold mines, and the metal found in the two laſt, is, by way of pre-eminence, called Oro Capote, being the moſt valuable of any yet diſcovered. Another kind of mines of the ſame metal has alſo been found in this kingdom; but theſe were exhauſted almoſt as ſoon as they were opened. Mines of this kind are very common, as well as another kind called Lavaderos *, moſt of which are between Valparaiſo and Las Pennuelas, and about a league from the former. Some of them are alſo found at Yapel, on the frontiers of the wild Indians, and near Conception. Theſe, together with the others known in this kingdom, yield gold duſt. Sometimes indeed lumps of gold of conſiderable magnitude are found; and the hopes of diſcovering theſe animate many to work the mines.

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* Theſe Lavaderos are pits dug in the angles of ravins or trenches made by rain, and in which it is imagined there may be gold, and in order to diſcover the metal, a ſtream of water is turned through it, and the earth briſkly ſpread, that the gold may be carried down with the current, and depoſited in the pits.

ALL the gold thus collected in Chili is bought up in the country, and ſent to Lima to be coined, there being no mint in Chili; and by the accounts conſtantly taken, it amounts one year with another to ſix hundred thouſand dollars; but that clandeſtinely ſent by way of the cordillera is ſaid to be nearly four hundred thouſand. Conſequently the whole muſt be at leaſt a million. In the countries of Coquimbo and Guaſco mines of all kinds of metals are ſo very common, that the whole earth ſeems wholly compoſed of minerals; and it is here thoſe of copper are worked, and from them all Peru and the kingdom of Chili are furniſhed with that metal. But though this copper exceeds every thing of the kind hitherto known, the mines are worked with great caution, and no more metal extracted than is ſufficient to anſwer the uſual demand; and other mines, though known to be equally rich, are left untouched.

IN exchange for the grain, fruits, proviſions, and metals, which Chili ſends to Peru, it receives iron, cloth, and linen made at Quito, hats, bays, though not many of the latter, there being manufactures of the ſame kind in Chili, ſugar, cacao, ſweetmeats, pickles, tobacco, oil, earthen ware, and all kinds of European goods. A ſmall commerce is alſo carried on between the kingdom of Chili, Paraguay and Buenos Ayres, of which the latter is the ſtaple. The products of Paraguay, which indeed conſiſt only in its herb and wax, are carried thither, then forwarded to Chili, whence the herb is exported to Peru. Large quantities of tallow are alſo ſent to Mendoza for making of ſoap. In exchange for theſe commodities Chili ſends to Buenos Ayres linen and woollen ſtuffs, ſome of which are imported from Peru, and others manufactured in the country: alſo Ponchos, ſugar, ſnuff, wine and brandy, the two laſt the traders chiefly buy at San Juan, as moſt convenient for tranſportation. During the aſſiento for negroes, they are uſually brought to Chili from the factory at Buenos Ayres, the way of Peru being attended with great inconveniences; as in their journey from Panama, they take an opportunity of concealing themſelves among the farm-houſes; ſo that what with the great expence, and the numbers who die during their long rout, by the variety of climates, their purchaſe muſt conſequently be very high.

The home commerce of Chili, or that carried on within itſelf, chiefly conſiſts in the proviſions ſent to Valdivia to the amount of ten thouſand dollars, which as the deducted part of its remittance are ſent from Lima to Santiago for that purpoſe. Valdivia furniſhes the reſt of the places with cedar. Chiloe purchaſes from the other parts brandy, wine, honey, ſugar, the Paraguay herb, ſalt and Guinea-pepper; and returns to Valparaiſo and Conception, ſeveral kinds of fine wood, in which the iſland abounds; alſo woollen ſtuffs of the country manufacture, made into ponchos, cloaks, quilts, and the like; together with hams, which from the particular delicacy of the flavour are in great requeſt even in Peru, and dried pilchards, the bay and coaſt of that iſland being the only places in the ſouth-ſea where the fiſh are caught.

Coquimbo ſends copper to Valparaiſo; for tho' all parts of the Cordillera, towards Santiago and Conception, abound in mines of that metal, and particularly a place called Payen, where ſeveral were formerly worked, and where maſſes of fifty or a hundred quintals of pure copper have been found, yet as theſe mines are now no longer worked, the whole country is under a neceſſity of receiving their copper from the Coquimbo and Guaſco mines; ſending thither in exchange cordovan leather and ſoap, made at Mendoza, from whence it is carried to Santiago. and thence ſold to different parts of the kingdom.

Having thus conſidered the trade of Chili in both particulars, I ſhall next proceed to mention that carried on with the wild Indians, and this conſiſts in ſelling them hard ware, as bits, ſpurs, and edge tools; alſo toys, and ſome wine. All this is done by barter; for though the countries they inhabit are not deſtitute of gold, the Indians cannot be prevailed upon to open the mines; ſo that the returns conſiſt in Ponchos, horned cattle, horſes of their own breeding, and Indian children of both ſexes, which are ſold even by their own parents for ſuch trifles; and this particular kind of traffick, they call reſcatar, ranſoming. But no Spaniard of any character will be concerned in ſuch barbarous exchanges, being carried on only by the Guaſos, and the meaneſt claſs of Spaniards ſettled in Chili. Theſe boldly venture into the parts inhabited by the Indians, and addreſs themſelves to the heads of the ſeveral families.

THE Indians of Arauco, and thoſe parts, are not governed by Caciques, or Curacas, like thoſe of Peru, the only ſubordination known among them being with regard to age, ſo that the oldeſt perſon of the family is reſpected as its governor. The Spaniard begins his negociation with offering the chief of the family a cup of his wine. After this he diſplays his wares, that the Indian may make choice of what beſt pleaſes him; mentioning at the ſame time the return he expects. If they agree, the Spaniard makes him a preſent of a little wine; and the Indian chief informs the community that they are at liberty to trade with that Spaniard as his friend. Relying on this protection, the Spaniard goes from hut to hut, recommending himſelf at firſt by giving the head of every family a taſte of his wine. After this they enter upon buſineſs, and the Indian having taken what he wanted, the trader goes away without receiving any equivalent at that time, and viſits the other huts, as they lie diſperſed all over the country, till he has diſpoſed of his ſtock. He then returns to the cottage of the chief, calling on his cuſtomers in his way, and acquainting them that he is on his return home. Upon this ſummons, not one fails of bringing him to the chief's hut, what had been agreed on. Here they take their leave of him, with all the appearance of a ſincere friendſhip, and the chief even orders ſome Indians to eſcort him to the frontiers, and aſſiſt him in driving the cattle he has received in exchange for his goods.

Formerly, and even till the year 1724, theſe traders carried large quantities of wine, of which, as well as of all other inebriating liquors, the Indians are immoderately fond; but on account of the tumults and wars that aroſe from the intemperate uſe of ſpirituous liquors, this branch of trade has been ſuppreſſed, and no more wine allowed to be carried into the Indian territories, than what ſhall be judged neceſſary to give the maſters of families a cup by way of compliment, and a very ſmall quantity for trading. The happy effects of this prohibition are felt on both ſides; the Spaniards live in ſafety, and the Indians in peace and tranquility. They are very fair dealers, never receding from what has been agreed on, and punctual in their payments. It is indeed ſurprizing that a whole people, who are almoſt ſtrangers to government, and ſavage in their manners, ſhould, amidſt the uncontrouled gratification of the moſt enormous vices, have ſo delicate a ſenſe of juſtice, as to obſerve it in the moſt irreproachable manner in their dealings.

All the Indians of Arauco, Tucapel, and others inhabiting the more ſouthern parts of the banks of the river Biobio, and alſo thoſe who live near the cordillera, have hitherto fruſtrated all attempts made for reducing them under the Spaniſh government. For in this boundleſs country, as it may be called, when ſtrongly puſhed, they abandon their huts, and retire into the more diſtant parts of the kingdom, where being joined by other nations, they return in ſuch numbers, that all reſiſtance would be temerity, and again take poſſeſſion of their former habitations. Thus Chili has always been expoſed to their inſults; and if a very few only call for a war againſt the Spaniards, the flame immediately ſpreads, and their meaſures are taken with ſuch ſecrecy, that the firſt declaration of it is, the murder of thoſe who happen to be among them, and the ravages of the neighbouring villages. Their firſt ſtep, when a war is agreed on, is, to give notice to the nations for aſſembling; and this they call Correa la Fletcha, to ſhoot the dart, the ſummons being ſent from village to village, with the utmoſt ſilence and rapidity. In theſe notices they ſpecify the night when the irruption is to be made, and tho' advice of it is ſent to the Indians who reſide in the Spaniſh territories, nothing tranſpires: nor is there a ſingle inſtance, among all the Indians that have been taken up on ſuſpicion, that one ever made any diſcovery. And as no great armaments are neceſſary in this kind of war, their deſigns continue impenetrable till the terrible executions withdraw the veil.

THE Indians of the ſeveral nations being aſſembled, a general is choſen, with the title of Toqui; and when the night fixed on for executing their deſigns arrives, the Indians who live among the Spaniards, riſe and maſſacre them. After which they divide themſelves into ſmall parties, and deſtroy the ſeats, farm-houſes and villages, murdering all without the leaſt regard to youth or age. Theſe parties afterwards unite, and in a body attack the larger ſettlements of the Spaniards, beſiege the forts, and commit every kind of hoſtility; and their vaſt numbers, rather than any diſcipline, have enabled them, on ſeveral occaſions, to carry on their enterprizes with ſucceſs, notwithſtanding all the meaſures taken by the Spaniſh governors to prevent them. For tho' multitudes of them fall on theſe occaſions, their army continually receives larger reinforcements. If at any time the Spaniards gain the ſuperiority, the Indians retire to the diſtance of ſeveral leagues, where after concealing themſelves a few days, they ſuddenly fall on a different part from that where they were encamped, endeavouring to carry the place by a ſudden aſſault, unleſs the commandant's vigilance has provided againſt any ſudden ſurprize; when, by the advantage of the Spaniſh diſcipline, they are generally repulſed with great ſlaughter.

These Indian wars againſt the Spaniards uſually continue ſome years, being of little detriment to the Indians; for moſt of their occupations which conſiſt in the culture of a ſmall ſpot of ground, and weaving ponchos and cloaks for apparel, are carried on by the women. Their huts are built in a day or two, and their food conſiſts of roots, maize, and other grain. War, therefore, is no impediment or loſs to them; indeed they rather conſider it as a deſirable occupation, their hours at other times being ſpent in idleneſs, or carouſals, in which they drink chicha, a liquor common among them, and made from apples.

The firſt advances towards a treaty of peace with theſe Indians are generally made by the Spaniards; and as ſoon as the propoſals are agreed to, a congreſs is held, at which the governor, major-general of Chili, and the principal officers, the biſhop of Conception, and other perſons of eminence aſſiſt. On the part of the Indians the toqui, or generaliſſimo, and the captains of his army, as repreſentatives of the communities, repair to the congreſs. The laſt inroad made by theſe ſavage enemies, was in the year 1720, during the government of Don Gabriel Cano, lieutenant-general of his majeſty's forces, who managed the war againſt them with ſuch vigour and addreſs; that they were obliged to ſolicit a peace; and their preliminaries were ſo ſubmiſſive, that at a congreſs held in 1724, the peace was concluded, whereby they were left in poſſeſſion of all the country ſouth of the river Biobio;

and the Capitanes de Paz were ſuppreſſed. Theſe were Spaniards reſiding in the villages of the converted Indians, and by their exactions had been the principal cauſe of the revolt.

Besides the congreſſes held with theſe Indians, for concluding a treaty of peace, others are held on the arrival of a new preſident, and the ſame ceremonies obſerved in both; ſo that an account of the one will be ſufficient to give a juſt idea of the other.

On the holding a congreſs, the preſident ſends notice to the frontier Indians of the day and place, whither he repairs with the abovementioned perſons; and on the part of the Indians, the heads of their ſeveral communities; and both, for the greater ſplendor of the interview, are accompanied by an eſcort conſiſting of a certain number previouſly agreed on. The preſident and his company lodge in tents, and the Indians incamp at a ſmall diſtance. The elders or chiefs of the neighbouring nations pay the firſt viſit to the preſident, who receives them very courteouſly, drinks their healths in wine, and himſelf gives them the glaſs to do the like. This politeneſs, with which they are highly pleaſed, is ſucceeded by a preſent of knifes, ſciſſars, and different ſorts of toys, on which they place the greateſt value. The treaty of peace is then brought on the carpet, and the manner of obſerving the ſeveral articles is ſettled: after which they return to their camp, and the preſident returns the viſit, carrying with him a quantity of wine ſufficient for a moderate regale.

Now all the chiefs of the other communities, who were not preſent at the firſt viſit, go in a body to pay their reſpects to the preſident. At the riſing of the congreſs, the preſident makes each a ſmall preſent of wine, which the Indians liberally return in calves, oxen, horſes, and fowls. After theſe reciprocal tokens of friendſhip, both parties return to their reſpective habitations.

In order to gain more effectually the hearts of theſe Indians, who, though in our eſteem wretchedly poor, conceal the moſt ſtubborn pride, which can only be ſoftened by compliments and favours, it is a maxim with the preſidents to admit to their table thoſe who are apparently of the beſt diſpoſitions, and during the three or four days of the congreſs, neglects no means of ingratiating himſelf with the whole body. On theſe occaſions a kind of fair is held at both camps, great numbers of Spaniards repairing thither with ſuch goods as they know will pleaſe the Indians, who alſo come with their ponchos and cattle. Both parties deal by exchange, and never fail of ſelling their whole ſtocks; and of obſerving in their dealings the moſt exact candour and regularity, as a ſpecimen in which all future commerce is to be conducted.

Tho' theſe Indians have ſhewn ſuch a determined averſion to ſubmitting to the Spaniſh monarchs, their behaviour has been very different to the miſſionaries, whom they voluntarily permitted to come among them; and many have even ſhewed the greateſt joy at being baptized. But it is extreamly difficult to prevail on them to quit their free manner of living; which being productive of vice and ſavageneſs, prepoſſeſs the mind againſt the precepts of the chriſtian religion. Before the war of the year 1723, the miſſionaries, by their indefatigable zeal, had formed ſeveral villages, hoping by that means to induce their converts to practiſe the doctrines of the chriſtian faith. Theſe villages were called St. Chriſtover, Santo Fé, Santa Juana, St. Pedro, and La Mocha, all of them being under the inſpection of the Jeſuits. The chaplains alſo of the forts on the frontiers had an additional ſalary for inſtructing a certain number of Indians. But on that general inſurrection, their innate ſavageneſs returned, all theſe converts abandoned the mſiionaries and joined their countrymen. On the re-eſtabliſhment of the peace, they again ſolicited the miſſionaries to come among them; and ſome communities have been ſince formed; but they are far ſhort of their former promiſing ſtate, it being very difficult to bring even this ſmall number to embrace a ſocial life.

Amidst all the ſanguinary rage of theſe Indians in their hoſtilities againſt the Spaniards, they generally ſpare the white women, carrying them to their huts, and uſing them as their own. And hence it is, that many Indians of thoſe nations have the complexions of the Spaniards born in that country. In time of peace many of them come into the Spaniſh territories, hiring themſelves for a certain time to work at the farm houſes, and at the expiration of the term return home, after laying out their wages in the purchaſe of ſuch goods as are valued in their country. All of them, both men and women, wear the poncho and manta, which they weave from wool, and tho' it cannot be properly called a dreſs, it is abundantly ſufficient for decency; whereas the Indians at a greater diſtance from the Spaniſh frontiers, as thoſe who inhabit the countries ſouth of Valdivia, and the Chonos who live on the continent near Chiloe, uſe no ſort of apparel ‡. The Indians of Arauco, Tucapel, and other tribes near the river Biobio, take great delight in riding, and their armies have ſome bodies of horſe. Their weapons are large ſpears, javelins, &c. in the uſe of which they are very dextrous.

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‡ Theſe Indians now dreſs like the former. A.

CHAP.

CHAP. X.

Voyage from CONCEPTION *to the Iſland of* JUAN FERNANDES; *and from thence to* VALPARAISO.

THE ſhips being come to an anchor in the port of Talcaguano, we waited on Don Pedro de Mendinueta, at the city of Conception, who informed us that the commodore Don Joſeph Pizarro, together with the land and ſea officers, were arrived at Santiago, and that he intended to ſet out for Valparaiſo, in order to hoiſt his flag on board the Eſperanza, and take upon him the command of that ſquadron, on receiving this intelligence, and having no orders to continue at Conception, we put to ſea on the ſixth of February, and ſteering for the place of our deſtination, made, on the 20th, the iſland de Tierra de Juan Fernandes, and at half an hour after ten, as we were plying to windward along the coaſt, and ſtanding towards the iſland which then bore two leagues weſt from us, we ſaw on the top of one of the mountains a bright light, which ſurprized us the more, as on the following day we ſaw no traces of any ſhip's being in the port ſince we left it. I had a clear view of it from the inſtant it began, and obſerved that at firſt it was very ſmall, and increaſed, ſo as to form a flame like that of a flambeau. The full vigour of its light laſted about three or four minutes, when it diminiſhed in the ſame gradual manner it had increaſed. It did not appear again all the next night, nor had we during the whole time we were at an anchor in the port, any view of ſuch a phænomenon. We ſent ſome of our people on ſhore to examine all the mountains, and other parts of the iſland, and they ſpent ſeveral nights on that and the adjacent mountains, but could not diſcover the leaſt veſtige of any fire. As I knew the iſland to be abſolutely deſtitute, the ſanguine colour of the flame, inclined me to think there might be ſome volcano; but having never ſeen any thing of that kind before, nor heard from others that there was ever any eruption, I was far from being tenacious of my opinion. We had indeed all our conjectures; but the difficulty was not cleared up till my fifth and laſt voyage to this iſland, when Don Joſeph Pizarro, ſent ſome people on ſhore to take an accurate ſurvey of this place, and the ground was found to be burnt, full of fiſſures and hot, which verified my firſt opinion of a volcano.

ON the 21ſt after coaſting along this iſland, we continued our courſe for Valparaiſo, where our little ſquadron came to an anchor on the 24th, and were the more pleaſed as we found there the preſident of Santiago, Don Joſeph Manſo, and our commodore; and in the harbour, beſides the Callao fleet, three French ſhips, called the Louis Eraſme, Notre Dame de la Delivrance, and the Lys, which had been freighted by four merchants as regiſter ſhips; and Valparaiſo was the firſt port they had touched at, for vending their cargoes.

FROM ſeveral obſervations made in this harbour by Don George Juan, in the laſt voyage of 1744, its latitude appears to be 33° 02′ 36″ 30‴ and father Fevillee ſettled its longitude at 304° 11′ 45″ from the meridian of Teneriff. This town was at firſt very mean, conſiſting only of a few warehouſes built by the inhabitants of Santiago for laying up their goods till ſhipped off for Callao, the harbour of Valparaiſo being the neareſt port to that city, from which it is only twenty leagues diſtant, though the natives will have it to be more. The only inhabitants at that time were the few ſervants left by their reſpective maſters for taking care of the warehouſes, and managing their mercantile affairs. But in proceſs of time, the merchants themſelves, together with ſeveral other families, removed from Santiago, in order to be more conveniently ſituated for trade; ſince which it has gradually increaſed, ſo that at preſent it is both large and populous; and would be ſtill larger were it not for its inconvenient ſituation, ſtanding ſo near the foot of a mountain, that a great part of the houſes are built on its acclivity, or in its breaches. The broadeſt and moſt convenient part is that along the coaſt, but this is very unpleaſant in winter, being ſo expoſed to the N. winds, that the waves beat againſt the walls of the houſes, ſome of which are built of unburnt bricks, ſome of chalk and pebbles, and others of bajareques.

Valparaiso, beſides its pariſh church, has a convent of Franciſcans, and another of Auguſtines; but very few religious, and the churches belonging to them ſmall and mean. It is inhabited by families of Spaniards, and Caſts, both Mulattoes, and Meſtizos. In its neighbourhood are ſeveral villages, and the great number of farm houſes give the country a chearful appearance. Here is a military governor nominated by the king, who having the command of the garriſons in the ſeveral ports, and of the militia of the place and its dependencies, is to take care that they are properly diſciplined.

The proximity of this port to Santiago has drawn hither all the commerce formerly carried on at that city. To this it owes its foundation, increaſe, and preſent proſperity. At preſent all the Callao ſhips which carry on the commerce between the two kingdoms come hither. The cargoes they bring are indeed but ſmall, conſiſting only of the goods already mentioned, as not produced in Chili. But in this port they take in wheat, tallow, cordovan, leather, cordage, and dried fruits, and with theſe return to Callao; and a ſhip has been known to make three voyages in one ſummer, namely, between November and June, during which interval, the droves of mules and carriages from all the farm houſes in the juriſdiction of Santiago, bring freſh ſupplies to the warehouſes, that trade is carried on both by land and ſea. The maſters of ſhips, who generally reſide at Lima or Callao, enter into partnerſhip with the landed gentlemen of Chili, that the cargo of every ſhip generally belongs in part to the maſter; though ſome ſhips are freighted, and if the loading be wheat, greatly augments its value; for the fanega coſts here only ten or twelve rials, or two dollars, and the freight is from twelve rials to two piaſters. Another circumſtance which raiſes the price of wheat at Callao, where it is ſold for twenty-four or thirty rials is, that the fanega is there only five arobas and five pounds, whereas at Chili the fanega is ſix arobas and ſix pounds.

This commerce being carried on only in ſummer, that ſeaſon may be termed the fair of Valparaiſo; but on the approach of winter the place becomes as remarkably deſolate, the crowd of traders repairing to Santiago, thoſe only continuing at Valparaiſo, who cannot afford to remove.

Valparaiso is abundantly ſupplied with proviſions from Santiago, and other places in its neighbourhood; but ſhips do not victual here ſo cheap as at Conception. The fruits cannot be viewed without admiration, both with regard to their beauty and ſize, particularly a ſort of apples called Quillota, being brought from that place; they prodigiouſly exceed the largeſt in Spain, and beſides their exquiſite flavour, are ſo luſcious that they melt in the mouth.

Among the ſeveral kinds of game, there is here ſuch a plenty of partridges in their ſeaſon, which begins at March and laſts ſeveral ſucceeding months, that the Santiago muliteers knock them down with ſticks without going out of the road, and bring great numbers of them to Valparaiſo. But few of theſe or any other birds are ſeen near the town. It is the ſame with regard to fiſh *, very little being to be caught either in

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* They take their fiſh by ſhooting a barbed arrow into them, which has a long light ſhaft, that ſuffers the fiſh not to ſink after it is wounded. A.

the harbour or along the coaſt, in compariſon of what may be taken in the other parts.

The coaſt of Valparaiſo forms a bay, lying N. E. and S. W. three leagues in length, and having two capes called Concon, and Valparaiſo. In the S. W. part of this bay is the harbour, of a convenient ſize, and running above a league farther up the country. The bottom is a firm tenacious mud. At the diſtance of a cable's length and a half from the ſhore, is from fourteen to ſixteen fathom water, which increaſes in depth proportional to the diſtance, that at the diſtance of half a league there is thirty-ſix or forty fathom. The harbour is every where free from rocks and ſhoals, except to the N. E. of the breach de los Angeles, where, about a cable's length or two from the land is a rock, which muſt be the more carefully avoided, as it never appears above water, but ſometimes has not a depth ſufficient for a ſhip of any burden to paſs over it. The courſe into this harbour is to keep near the point of Valparaiſo, within a quarter of a league from the ſhore, where there is twenty, eighteen, and ſixteen fathom water. After getting round the point you muſt ſtand nearer to the ſhore, in order to avoid a bank which lies thereabouts. Not, that it can be attended with any danger, for the ſide of it is ſo bold, that if the ſhip ſhould touch it little damage could enſue. This bank is always above water, and there is a neceſſity for paſſing ſo near it, in order to keep to windward, as otherwiſe it would be difficult to fetch the harbour. Regard muſt alſo be had to the time proper for entering the port of Valparaiſo; for it is by no means proper to attempt it in the morning, as the wind tho' blowing freſh without does not then extend ſo far into the bay, and thus the ſhip, by having very little way, and, conſequently not anſwering her helm, might drive upon the bank; and to let go your anchor in fifty fathom water, which is the depth cloſe to the ſand, will be very inconvenient. The common method therefore is, to keep in the offing till about noon, or ſomething after, when the wind uſually continues to the bottom of the harbour; and then by obſerving the abovementioned rules, the ſhip will fall into her ſtation without any difficulty. Or you may run into the bay and there come to an anchor, till the day following, and then weigh early and go in with the land breeze, here called Concon, as blowing from that point; and this breeze may be depended on every day at a certain hour, except during the time of the N. winds, which cauſe ſome alteration in it.

The ſafeſt method of mooring ſhips is lying one anchor on the ſhore towards the S. S. W. and another in the channel towards the N. N. W. The former muſt be well ſecured, as the reſource againſt the S. and S. W. winds; for though they come over the land, they are often ſo violent, and the ſhore of the harbour ſo ſloping, that the ſhips would otherwiſe drive.

As ſoon as the north winds ſet in, which happens in the months of April and May, the veſſels in the harbour are expoſed to their whole violence, which alſo cauſes a very high ſea. In this exigence, the whole ſecurity of the ſhips depends on the anchor and cable towards the N. N. E. it will therefore be very proper to lay another in the ſame direction; for if it ſhould give way, it would be impoſſible to hinder the ſhip from ſtriking on the rocks near the ſhore. The only favourable circumſtance here is, that the bottom being very firm, and riſing towards the ſhore, the anchor has good hold; and conſequently the whole depends on the ſtrength of the cable.

CHAP. XI.

Voyage from VALPARAISO *to* CALLAO; *ſecond return to* QUITO *to finiſh the obſervations; third Journey to* LIMA, *in order to return to* SPAIN *by the way of* CAPE HORN.

THE ſervice our ſquadron was employed on being that of cruiſing in thoſe ſeas, in queſt of the enemy as long as it ſhould be thought requiſite, the commodore, without ſtaying any longer than was abſolutely neceſſary, came on board, and we immediately put to ſea, and ſeveral times viſited the iſlands of Juan Fernandes, till the 24th of June, 1743, when we ſhaped our courſe for Callao, which port we entered on the 6th of July. The day following the commodore and principal officers went on ſhore, and were received by Don Joſeph de Llamas, general of the forces in Peru, and government of Callao; who, on account of the firſt employment, reſides at Lima, but was come to Callao to compliment the commodore. He attended him to Lima, and introduced him to the vice-roy, who expreſſed his great ſatisfaction at his ſafe arrival after ſuch long expectations. He was alſo met on the road by the principal perſons of the city.

AFTER taking our departure from the iſland de Tierra de Juan Fernandes, we ſteered the three firſt days N. N. E. and N. E. one quarter northernly, having freſh gales at W. and a heavy ſea from the S. W. When we came into the latitude of 28°, 30′ we ſteered N. ſix or ſeven degrees eaſterly, till the third day at nine in the morning, when being in the latitude of 16°, 28′, we made the land on the coaſt of Chala; and the day following, being the 4th, the iſland of Sangallan, which at noon bore E. N. E. diſtance ſix leagues. We then coaſted along the ſhore; and on the 5th at noon, we ſaw the iſle of

Aſia, bearing E. N. E. ſix leagues diſtant; and on the 6th as before-mentioned, the ſquadron came to an anchor at half an hour after one in the afternoon, in Callao harbour.

HENCE it appears, that till we were in the latitude of 28°, 30′, the wind was at S. W. which agrees with my obſervations, mentioned Chap. III. relating to this ſea; and if no other circumſtance concurred to verify them, it muſt be imputed to the ſeaſon of the year, it being the beginning of winter when we returned to Callao. But as during the firſt three days, the ſtrength of the wind had driven us near the coaſt; ſo from the latitude we found it farther to the ſouth; between 25 and 21, began to incline towards the S. E. and from the latitude of 20°, when we found ourſelves near the land, till our arrival at Callao, we had the wind S. S. E. and E. S. E. It was the ſame with regard to the ſea coming from the S. W. for it gradually diminiſhed as we approached the coaſt: ſo that from 25° it was not at all troubleſome, and after we were paſſed 21° became imperceptible. But it was very different with regard to the current, which from the parallel of 20 or 21°, we perceived to ſet towards the N. W. parallel to the direction of the coaſt, and became much more ſenſible after we had ſight of the land, its velocity increaſing, as latitude decreaſed.

I would recommend two precautions to be uſed in the voyage from Chili to Callao. The firſt is not to make the land in the bay of Arica, the many eddies of the current there rendering it very difficult to get again clear of the coaſt; which muſt be done by keeping along ſhore; as by ſtanding out to ſea, you will be in danger of not reaching the harbour: for the current ſetting N. W. on ſtanding in for the land, you will probably find yourſelf to leeward of the harbour; in which caſe it will be far from eaſy to work up againſt the wind and ſtrong current. The ſecond flows from the former, and is to make the land ſomewhere between Naſca and Sangallan, as the coaſt may be then kept at a proper diſtance, and the danger of falling to leeward of the port avoided: a misfortune which has happened to many, who have been carried farther out than they expected; ſo that after a long look out for land, they find themſelves on its firſt appearance to leeward of their port.

In winter, eſpecially, too much care cannot be taken, as from the continual thickneſs of the atmoſphere, obſervations cannot be made ſo often as requiſite; ſometimes not for five or ſix days ſucceſſively; at the ſame time the ſight of land is entirely intercepted by the denſity of the fog. This we experienced; for after we were anchored in Callao at only a quarter of a league diſtant from the land, the people on the ſhore had no ſight of the ſhips: and it was owing to our being very near the coaſt that we made the harbour; for had we been at a diſtance, we ſhould have been far to leeward, when the weather cleared up.

On the 25th of June, being the ſecond day after our departure from the iſland de Tierra de Juan Fernandes, we ſaw a meteor like that we had before ſeen at Quito, namely, a globe of fire, or large globe of inflammable exhalations. It firſt appeared in the weſt, at half an hour after three in the morning, and moved with great velocity for a conſiderable ſpace towards the eaſt, as if carried by the wind. The light of this meteor was ſuch, that the watch on the quarter-deck could plainly diſtinguiſh every perſon on the fore-caſtle; and both were not a little terrified. The phænomenon laſted between three and four minutes, and half an hour after we felt two violent ſhocks, at an interval of about a minute and a half betwixt them, ſo that all apprehended the ſhip had ſtruck on ſome ſhoal; but, on reflection, we concluded it to be the effect of an earthquake.

The ſquadron being ſafely arrived at Callao, with the commander in chief of the South-ſea, a title given to Don Joſeph Pizarro, and a ſufficient number of officers of ſuch diſtinguiſhed zeal and experience, that they might well ſupply our place without detriment to the ſervice; and, at the ſame time, we being willing to put the finiſhing hand to our principal work, we aſked the vice-roy's leave to return to Quito; but his excellency was deſirous that we ſhould firſt compleat ſome particulars he had committed to our care. Accordingly we applied ourſelves aſſiduouſly to our work; and Don George Juan, having finiſhed his part firſt, left Callao on the 14th of November, propoſing to make all the neceſſary preparatives againſt my arrival, that the proper obſervations might be made without delay. On the 27th of January, 1744, I reached Quito, where I found Don George Juan had, by his extraordinary care, nearly finiſhed every thing neceſſary for the continuation of our work; and whilſt the remainder was performing, we had an opportunity, in conjunction with Mr. Godin, the only French academician now remaining in this province, of obſerving the comet which appeared this year.

Though the comet might have been ſeen on the 2d and 3d of February, the atmoſphere of Quito being ſo unfavourable to aſtronomical obſervations on account of the clouds, it was the 6th before we could obſerve it. The comet was then near the weſtern part of the horizon, and being behind the mountain of Pichinca, its altitude concealed it from our ſight, ſo that we could not obſerve it after ſeven or eight at night. On the 6th, at ſeven in the evening, we found its altitude above the horizon to be 15 degrees, and its azimuth from the N. 72 degrees; Mr. Godin and Don George Juan judged its nucleus to be oblong, to me it appeared perfectly circular; but we all agreed that it was larger than Jupiter. The tail, which we diſcerned through ſome light clouds, ſeemed to extend two degrees, and to form with the verticle circle, an angle of near thirty degrees.

On the 7th, at eight minutes after ſeven in the evening, on repeating our obſervations, we found its altitude to be 11°, 11′, and its azimuth from the north 72°, 45′. From this ſecond obſervation, which we conſidered as more accurate than the former, having made proper allowances for refraction, we concluded that the right aſcenſion of the comet was 332°, 50′, and that its northern declination was 20°, 5′. Whence we inferred, that its trajectory was the ſame with that obſerved in 1681 by Caſſini, and by Tycho Brahe in 1577, and that, in all probability it was the ſame; for though the periods do not agree, it might have appeared twice in the firſt interval. After this we were hindered from proſecuting our obſervations by the cloudineſs of the nights: and ſome days afterwards we were aſſured by ſeveral, that they had ſeen it in the morning.

As all the triangles on the north-ſide from Pambamarca, to the place where Mr. Godin had made his ſecond aſtronomical obſervations were not compleated, and the inſtrument conſtructed for that purpoſe kept in readineſs, we made that our firſt taſk; Mr. Godin not having then gone through them all. After finiſhing every thing here, we repaired on the 22d of March to the obſervatory de Pueblo Viejo de Mira, where meeting with the ſame difficulties from the thickneſs of the atmoſphere, as we had before experienced during the whole courſe of our operations, we were obliged to continue there till the 22d of May, when being ſatisfied with the accuracy of the obſervations made during this long interval, we returned to Quito, with the pleaſing expectation, that our perſeverance againſt the conſtant difficulties we met with from the clouds was at laſt come to a period; and that we ſhould now reſt from the toils and hardſhips of living on frozen deſarts; a repoſe the more pleaſing, as it was accompanied with a conſciouſneſs that no inconveniences had occaſioned us to omit the leaſt part of our duty.

DURING our ſtay at Mira, Don George Juan applied himſelf to obſerve the variation of the magnetic needle, and by four obſervations nearly coincident, he concluded to be nearly 8°, 47′, eaſterly.

WE now began to deliberate on our return upon the favourable opportunity of the above-mentioned French ſhips, which were preparing to ſail for Spain; as we ſhould then paſs round Cape Horn, and not only complete from our own experience, an account of the South-ſea, but be enabled to make obſervations on the whole courſe. Another, and indeed our principal motive was, the ſafety of our papers, concluding there could be no danger in a neutral ſhip, as we then imagined thoſe to be. The concurrence of ſo many advantages immediately determined us; and leaving Quito we ſet out for Lima, where I arrived firſt, Don George Juan having ſome days been detained at Guayaquil by a freſh commiſſion by the vice-roy. Theſe ſhips, not ſailing ſo ſoon as expected, I employed the interval in drawing up an extract of all intereſting obſervations and remarks, and preſented it to the vice-roy, who was pleaſed to order the papers to be preſerved in the ſecretary's office, that if any misfortune ſhould happen to us in the voyage, our ſovereign might not be totally diſappointed in his generous views of promoting the uſeful ſciences of geography and navigation.

WHILE we were employed in finiſhing our obſervations at Mira, the univerſity of Lima gave a remarkable teſtimony of their ſenſe of Mr. Godin's eminent talents, by chuſing him profeſſor of mathematics, in the room of Don Pedro de Peralta, deceaſed; which he accepted of with the greater ſatisfaction, as ſome indiſpenſable affairs of his company would not permit him to gratify his deſires of returning to Europe. Accordingly he propoſed to ſpend this interval in making freſh obſervations and experiments, concluding that the atmoſphere of Lima, during the ſummer ſeaſon, would be more favourable to his deſigns than that of Quito or the mountains. On his arrival at that city, the vice-roy, who was no ſtranger to his great abilities, and pleaſed with the prudent choice of the univerſity, conferred on him, at the ſame time of his being inveſted with the profeſſorſhip, the poſt of coſmographer to his majeſty; with other advantages annexed to it. But this gentleman was far from propoſing to make any longer ſtay there than what theſe affairs required; no advantages or honours being ſufficient to make him forget the obligations he was under of giving an account of his voyage and obſervations to his ſovereign and the academy, eſpecially as being the eldeſt of the three academicians; ſo that all the teſtimonies of eſteem could not ſuppreſs his uneaſineſs at the delay.

M. de Juſſieu, tho' with the ſame regret as the former, determined to continue ſome time at Quito, with M. Hugot, till he ſaw what turn the war would take, that he might eſcape, in his return to Europe, thoſe dangers then ſo common at ſea. M. Verguin choſe to go by the way of Panama: and the others, except the two who died in the country, one at Cayambe and Cuença, were diſperſed; one ſettling in Quito. Thus, the whole French company ſeparated: and it muſt be conſidered as a ſingular happineſs, that after ſuch a ſcene of labours, hardſhips, and dangers, in ſuch a variety of climates, and amidſt ſuch inhoſpitable deſarts and precipices, our operations were accurately performed: and we capable of entering on a new ſcene of dangers and difficulties, which it was our fortune to experience before we were in a condition of preſenting this work to the publick.

BOOK IX.

Voyage from CALLAO *to* EUROPE; *with an Account of the Voyage from* CONCEPTION *in* CHILI *to the Iſland of* FERNANDO DE NORONA, CAPE BRETON, NEWFOUNDLAND, *and* PORTSMOUTH *in* ENGLAND: *and from the ſame Harbour in the South-ſea to* CAPE FRANCOIS *in* St. DOMINGO, *and from thence to* BREST *in* FRANCE.

CHAP. I.

Departure from CALLAO, *Arrival at the Bay of* CONCEPTION. *Voyage from thence to* FERNANDO DE NORONA.

HAVING, as I have already obſerved, determined on the voyage for returning to Spain; on our arrival at Lima, in the year 1744, we were informed that two of the French frigates, Notre Dame de la Delivrance and the Lys, lay at Callao, and were ſoon to ſail. Such a favourable opportunity was not to be miſſed, and accordingly Don George Juan and myſelf agreed for our paſſage, and alſo to make the voyage in ſeparate ſhips, that one at leaſt might eſcape the dangers to be apprehended in ſo long a voyage; there being thus the greater probability that one might reach his country, and there give an account of our proceedings with regard to the commiſſion with which we had been honoured.

THE vice-roy had given us leave to return with the greateſt marks of eſteem; and the ſhips being ready we embarked on the 22d of October; and the ſame day put to ſea, ſteering our courſe for Chili. The two frigates kept company till the 11th of November, when they ſeparated in the latitude of 33°, 40′, the Lys being obliged to touch at Valparaiſo, whilſt the Delivrance continued her courſe for Conception-bay; where ſhe came to an anchor on the 21ſt of November. This voyage was remarkably ſhort, being performed in twenty-nine natural days. What greatly contributed to this expedition was, that having put to ſea at the end of winter, we fell in with ſome breezes at N. which carried us to the ſouthward, and ſaved us the trouble of ſtanding ſo far out to ſea, as muſt be done when the ſummer is advanced.

In this bay we found the Louis Eraſme frigate, which had waited there ſome time, in order to ſail in company with us; and on the 6th of January, 1745, we were joined by the Lys, accompanied with another French ſhip, called la Marquis d' Antin, which having come hither as a regiſter ſhip, had taken in a loading of cacao at Guayaquil, and was in her return to Europe. The ſeaſon being far advanced, our little ſquadron put to ſea the firſt fair wind, which happened on the 27th of January, when about ten in the morning we all got under ſail, ſteering W. and W. one quarter northerly, accordingly as the winds would permit, which were continually varying from S. W. to S. S.E. On the fourth of February we found ourſelves in the latitude of 35°, 21′, and 9°, 38′, weſt of the meridian of Conception; when the wind blowing freſh at S.W. by W. we tacked in order to ſtand to the ſouthward. The next day we were informed that a very dangerous leak had been diſcovered in the head of the Lys, and that it was ſo far under water as not to be ſtopped without going into ſome harbour and lightening the ſhip; which had determined the captain to run into ſome of the harbours of Chili in order to ſtop the leak; accordingly he left the reſt of the fleet the ſame day. The Delivrance, on board of which I embarked, was in little better condition, making daily a great deal of water ever ſince our departure from Conception. But the captain, unwilling to loſe the benefit of ſailing in company, and, at the ſame time, fearful that his men would leave the ſhip, determined to keep the ſea. He alſo apprehended, that as the ſhip's hull was very old, and greatly ſhattered by her late voyage, on being ſearched, the neceſſary repairs would require a conſiderable time; and thence, beſides the coſts, he would find it difficult to get round the cape that year. Theſe conſiderations determined him to continue his voyage, without acquainting the other ſhips of the bad condition of his veſſel. But this prudence had nearly proved fatal to all on board, as the defects were greatly increaſed during the courſe of the voyage.

TILL the 6th the winds were variable, ſometimes freſh, then dying away; the ſea proportionable, running high in a freſh gale, and abating with the wind.

FROM the latitude of 35°, 21′, we ſteered between the S. E. and S. and on the 12th, being in the latitude of 41°, 20′, we were obliged again to ſteer between S. W. and W. till the eighteenth; when we found ourſelves in the latitude of 45°, 20′. The winds were firſt at W. afterwards N. N. E. from which they changed to the E. N. E. and N. E. and varying continually, at laſt ſhifted to the S. E. S. and E. During this interval, every change of the winds was attended with calms and violent ſhowers; and at other times the ſea was covered with fogs, or the atmoſphere ſo clouded with vapours as to intercept the rays of the ſun.

FROM the time we left Conception till the 7th of February, being then in 36°, 12′, and 9°, 20′, weſt of the meridian of Conception, we always ſaw that kind of birds called Pardelas, but here they left us. On the 11th, in the latitude of 40°, 45′, and ſomething more to the weſtward than on the 7th, we ſaw

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a number of ſmall black birds, flying ſingly, and againſt the current of the water. On the 15th, the weather being fair, but the wind blowing freſh at W. S. W. we ſaw a Quebrantahueſſos, or oſſifrage; and on the 16th, being in the latitude of 44°, 31′, and 11°, 24′, weſt of the meridian of Conception, we ſaw ſeveral flights of Curlews and Pardelas; and the Quebrantahueſſos kept continually in ſight of the ſhip: ſoon after the wind came about to the S. W. and blew ſo ſtrong, that the frigates were obliged to hand all their ſails except their courſes. On the 18th the wind abated, the ſea, which ran exceeding high, became tolerably ſmooth, and the Quebrantahueſſos diſappeared at the beginning of this welcome change of weather.

From the 18th to the 26th our courſe was eaſt, one quarter ſoutherly, and S. E. one quarter eaſterly; the winds being variable between the S. S. W. and W. S. W. with ſome ſhort tranſitions to N. W. From the 26th to the 3d of March we ſteered E. S. E. and E. with the ſame winds, but ſo very variable, that from W. they ſhifted to the S. W. and from thence flew about to the E. ſo that in this interval they blew from every point of the compaſs, but rarely continued a ſingle day in one direction. Sometimes for three or four hours we had a freſh gale, this ſoon died away, and was often ſucceeded by calms, being regular only in inconſtancy.

On the 20th of February we had a ſtrong gale of wind at W. S. W. which obliged us to double reef our topſails. We were then in 48°, 2′, latitude. On the 21ſt the wind abated, and continued ſo all the morning with an eaſy ſea. At noon the wind freſhened, and a ſtorm came on at W. N. W. W. and W. S. W. ſo that we could carry only our reefed courſes. The ſtorm continued till the 23d about ſun-ſet, when we let out the reefs in our courſes, and ſet our topſails, after reefing them. During the whole time we had a very hollow ſea, and at the ſame time the atmoſphere ſo hazy, that ſometimes we loſt ſight of the other ſhips. This fog precipitated itſelf in a mizzling rain, which continued inceſſantly two days after the ſtorm was over.

On the 20th we were amuſed with the ſight of a great number of birds of all ſizes, and among them one larger than a gooſe, and entirely black. On the 21ſt their numbers increaſed, ſome of which were larger than the Quebrantahueſſos, but ſeemed to be of the ſame ſpecies. All the feathers of this bird were white, except thoſe on the upper part of its wings, which were brown. Its wings were long, ſlender, and ſomething curved. On the 22d, when we were in the latitude of 51°, 2′, and 9°, 35′ weſt of the meridian of Conception, they continued with us in the ſame numbers. On the 23d they increaſed, and among them were ſeveral gulls. The feathers on the bodies of the latter were white, their tails ſhort and broad, their necks large but well proportioned, and their heads and beaks anſwerable: on the upper parts of their wings the feathers were black, and white underneath; the wings very diſproportionate in length, and conſiderably crooked at the middle articulation. This bird flies very ſwift, ſometimes juſt above the ſurface of the water, then mounts into the air; and after taking two or three gyrations, they again dart down near the water's edge. On the 25th, the weather being foggy, with a mizzling rain, in the latitude 55°, 6′, and 6°, 42′, weſt of the meridian of Conception, we ſaw great numbers of birds, and among them the Quebrantahueſſos of both the kinds already mentioned, and on the 26th ſeveral Toninas, a kind of wild ducks.

On the 27th we had little or no wind, with ſnow and hail. The birds ſhewed themſelves in greater numbers and variety than before; but the moſt numerous were gulls, like thoſe already deſcribed, but the colours ſomething different; ſome being of an aſh colour; others had their whole bodies white, and their wings black, and others the reverſe. Some, though very few, were entirely black, without the leaſt ſpot of white. We alſo ſaw among them the Toninas, with their white bellies and brown backs.

On the 1ſt of March, being in the latitude of 57°, 50′, and 0°, 3′ eaſt of the meridian of Conception, we ſaw ſome whales, but the number of birds were conſiderably diminiſhed: the ſnow and hail ſtill continued; the denſe clouds, which were continually forming in that part of the horizon whence the winds blow, precipitating themſelves in theſe meteors; and though the winds were moderate, the clouds were conſtantly gathering. On the 3d we had thick weather; the cold became extreme, and a great deal of ſnow fell. The birds, alſo, returned in their former numbers; principally of the larger ſort.

On the ſame day, at noon, in the latitude of 58° 40′, and 4° 13′ E. of the meridian of Conception, a little W. of the meridian of Cape Horn, and 60 leagues to the ſouthward of it; we altered our courſe, ſteering E.N.E. and continued ſailing between that and the N. E. till the 28th of the ſame month. But the winds were ſo variable and unſettled, that there was ſcarce a day in which they did not blow from two different quarters, and ſometimes from points almoſt oppoſite.

On the 4th we had fair weather, with the wind at N. N. E. and W. on the 5th at S. E. and W. on the 6th S. and S. W. changing round the whole compaſs, and ſcarce ever continuing a day in one point, till the 8th, when we found ourſelves in the latitude of 55° 16′ and 14° 30′ E. of the meridian of Conception, having weathered both Cape Horn, and Staten Land. It ſnowed and hailed continually, ſo that it was ſix inches deep on the deck: but now it began to diminiſh, and with it the cold. The birds likewiſe no longer appeared in ſuch vaſt flocks:

and on the ſeventh we ſaw a new ſpecies of a dark brown colour, greatly reſembling geeſe, and, like them, keep ſwimming on the water for a long time. On the 8th we ſaw birds of a brown and white colour, in ſmall flocks, of ten or fifteen in each. Theſe alſo ſwam on the water, and when flying, kept always near the ſurface. On the 9th being in the latitude of 54° 21′ and 16° 10′ E. of the meridian of Conception, beſides the ſame flocks of birds, we alſo ſaw Pardelas, but of a leſs ſize than thoſe in the South Sea. On the 10th in the latitude of 54° 1′ and 17° 38′ E. of Conception, the winds were very variable between the N. N. E. and S. W. with ſo thick a fog, that the ſhips fired guns to avoid running foul of one another; for each had kept two guns mounted for making ſignals. We had alſo heavy ſhowers, and in the evening ſaw flocks of birds, moſt of them of middling ſize, with dark brown feathers, and ſlender crooked wings. The whole difference between them conſiſted in the ſize, their form and colour being perfectly alike; and tho' we ſaw them during the whole day, they were in the greateſt numbers from four to ſix in the evening. On the 11th being in the latitude of 52° 15′, and 18° 9′ E. of Conception, we obſerved that the colour of the water was changed, it being now greeniſh; but another day's ſailing brought us into water of its uſual colour. On the 12th and 13th the wind blew freſh at N. W. and W. accompanied with heavy ſhowers, but of no long continuance, nor attended with any bad conſequences. Among the birds ſeen theſe two days, and which were more numerous than before, two ſpecies in particular engaged my attention; one large, reſembling vultures, with black wings, and their bodies of a light brown ſpotted with white: the other, tho' little different in colour from the former, did not exceed the Pardelas in ſize: both ſorts kept near the ſhip; and our men told us they had ſeen a ſhoal of fiſh, which had probably drawn ſuch numbers together.

On the 14th the wind variable betwixt the W. N. W. and S. W. and our latitude 48° 12′, we began to be ſenſible of an agreeable change in the temperature of the air; in the day time it was not cold upon deck, and at night the cabins were warm. On the 15th we had a freſh gale at W. N. W. and N.W. with a hollow ſea, which continued the two following days being the 16th and 17th, the weather was very hazy, ſudden ſhowers frequent, and the ſame number of birds ſtill continued. On the 16th the marquis d' Antin came along ſide and told us, that the ſhip had ſprung a leak, and that they had laboured the whole night to ſtop it, having, after a long ſearch, found it to proceed from a hole made by the rats in one of her quarters near the water's edge. This obliged them to heel the ſhip in order to ſtop it, and the other two ſlackened ſail that ſhe might come up with them. On the 17th we ſaw many large whales, ſeveral of which played round the ſhip for a conſiderable time.

The wind during the laſt day was at S. E. and at S. S. E. but moderate; the ſea ſmooth, with ſhowers of rain; when we found ourſelves in the latitude of 44° 30′ and 25° 13′ E. of Conception, and ſaw ſeveral flights of birds both of the large and ſmall ſpecies, but different in colour from any we had ſeen before, being intirely white.

The water now increaſed ſo prodigiouſly in our ſhip, that for ſome days our men had been almoſt continually labouring at the pump, which quite exhauſted their ſpirits; and all of us under the greateſt apprehenſions of periſhing. Nor was this a ſudden panic, the water ſometimes increaſing ſo ſuddenly, that notwithſtanding all our efforts it ſeemed to gain upon us. We obſerved that the principal leaks were at the head and ſtern, and the 19th proving a fine day, we hoiſted out our boat, for the carpenters to nail ſheet lead over the ſeams; but the ſea ran too high for them to execute it.

On the 20th the wind blowing ſtrong at N. and N.E. one quarter northerly, and the ſea running high, we laid to, under our mainſail; but rain coming on, we had, next day, moderate weather. The wind continued in the ſame quarter till the 25th, but little of it, with fogs and ſhowers. We were now in the latitude of 39° 14′ and 30° 5′ E. of the meridian of Conception. During theſe days we ſaw ſeveral birds, but in much leſs numbers than before; ſome of them very different, as black pardelas, and others of the ſame colour, but of an unknown ſpecies.

The water in our ſhips was now ſo greatly increaſed, and our men ſo ſpent with continually labouring at the pump, that we had thoughts of quitting her; and doubtleſs this would have been done ſome days before had it not been for her valuable cargo; having on board near two millions of Peruvian dollars, a million and a half of which was in gold and ſilver, and ſtowed under the cacao ſhe had taken in at Guayaquil. In order therefore in ſome meaſure to keep out the water, a ſail quilted with oakum, and ſhot faſtened to the clues to ſink it, was lowered into the water from the head of the ſhip; but this expedient had little effect. For tho' at firſt the water did not ſeem to enter with the rapidity as before, yet the oakum which prevented it, was ſoon carried away, when our condition was not mended in the leaſt.

From the 29th, when we were in the latitude of 35° 38′ and 33° 27′ E. of the meridian of Conception, our courſe was W. N. W. till the 4th of April, when till the 20th we ſteered between the N. E. and E. N. E. with the ſame variable weather, ſhowers, hard gales, and calms. So that during this long interval of twenty-nine days, our latitude diminiſhed little more than nine degrees and a half, finding ourſelves in the latitude of 25° 55′; and between the twenty-eighth and twenty-ninth degrees we were detained from the 7th to the 15th without being able to make better way. On the 29th of March we ſaw Pardelas and the other kind of black birds. On the 30th we took down our weather boards, and got our top-gallant-maſts up. During this time the birds ſeemed to have entirely forſaken us; but on the 3d of April, we ſaw great numbers; and on the 5th and 6th we ſaw a new ſpecies, reſembling a lark in ſhape and ſize. Here we had alſo a firſt ſight of the Dorados; but from hence we never miſſed ſeeing that fiſh and alſo the Bonito. On the 8th, in the latitude of 28° 58′, we began to meet with very thick fogs, violent and frequent ſqualls of wind and rain, which continued with little or no intermiſſion to the 13th, but that day proving fair, we made uſe of it in getting up and mounting our guns. The carpenters and caulkers were ordered into the boat, to endeavour to ſtop the leaks at the water's edge; for though they had nailed ſheet lead over the ſeams it did not anſwer the purpoſe, the water nearly iſſuing with the ſame rapidity. On the 18th, being in the latitude of 26° 52′, we firſt ſaw the flying-fiſh, and Taburones, but afterwards we had continual ſight of them, their numbers increaſing in proportion as we leſſened our latitude.

In the latitude of 39° 14′ on the 25th of March, Don Pedro de Arriago, freighter both of the Louis Eraſme, and la Delivrance, made an offer to the captains, that if they thought it neceſſary, proviſions and water growing ſcarce, they might put into the harbour of Monte Video, where they might not only refit the ſhips, and provide them with all neceſſaries, but alſo take the benefit of a convoy, the Aſia man of war being to ſail for Spain about that time, with commodore Don Joſeph Pizarro;

adding, that it was the more adviſeable to embrace this opportunity, advice having been received from Europe, three or four days before their departure from Conception, that France and England were at war. But the captains from ſelfiſh motives rejected this ſalutary propoſal, though at the ſame time they muſt be ſenſible that the want of water and proviſions, together with the bad condition of our frigate, would unavoidably oblige them to put into ſome harbour. And this, in oppoſition to the worthy merchant's advice, they determined ſhould be the deſart iſland of Fernando de Norona; for though the Portugueſe of Braſil had ſome time ſince ſent a colony thither, it was abandoned on account of its ſterility. The French India company alſo had for ſome time a ſettlement there, but were obliged, on the ſame account, to leave it; and during the time of that ſettlement, the captain of the marquis d'Antin had been there, and thence knew that it abounded with water and wood, the two articles moſtly wanted. Don Pedro Arriago adhered to his firſt propoſal, and it had doubtleſs been complied with by the two frigates freighted by him, had not the marquis d'Antin been in company, the captain of which made uſe of ſuch plauſible reaſons in ſupport of his opinion, that it prevailed, and we accordingly ſteered for the harbour of Fernando de Norona.

FROM the 20th to the 26th of April, we had calms and ſqualls, and from thence to the 8th of May, when we found ourſelves in the latitude of 16 deg. 58 min. we had little wind, and variable between the N. and E. but moſtly at N. E. nearly. On the 8th the wind began to freſhen, and tho' for ſeveral days it was at E. and E. N. E. we had it generally at E.S.E. till our arrival at Fernando de Norona. Our courſe from the 20th of April, was as the winds would permit, ſometimes N. N. W. N. W. one quarter northerly, and W. N. W. but from the 7th of

May, when the wind ſettled to the eaſtward, we ſteered N. and N. one quarter eaſterly to the 15th, when finding ourſelves in the latitude of 4 deg. S. being nearly the ſame with that of Fernando de Norona, we ſtood directly W. and having ſight of it at half an hour after nine in the morning of the 21ſt of May, all the frigates at half an hour after three in the evening, came to an anchor in the road, to our no ſmall joy. This voyage had continued an hundred and fifty days, and been attended with great fatigue and anxiety, on account of the bad condition of our frigate. For more than once, we had the greateſt reaſon to apprehend ſhe would founder before we had time to provide for our ſafety.

From the 6th of April, we ſaw no birds till the ſecond of May, when being in the latitude of 20° 18′, we ſaw an Rabiahorcado, which the French call Tailleur, the taylor, from the form and motion of its tail. This bird is about the ſize of a wood pigeon, with a ſhort neck, a proportionate bill, and its wings very long, broad and curved. The tail ſeemed to be compoſed of very few feathers, and theſe dividing at the root, ſo as to repreſent a pair of ſciſſars opened; but when it is on the wing, it ſhuts and opens them at pleaſure, repreſenting the manner of uſing that inſtrument. The two blades, of which the tail conſiſts, are very long in proportion to the body of the bird; and together with the whole plumage are of a fine gloſſy black, except the breaſt, which is a ſort of very pale aſh colour. It flies very ſwiftly, and generally high, never being ſeen low, but when hovering about a ſhip, as if intending to ſettle on it.

On the 4th of May we ſaw a pardela as large as a wood pigeon; the feathers on its belly, breaſt, and under the wings, were an aſh colour; and thoſe on the neck, head, and upper part of the wings, of a dark brown. From this day, when in the latitude of 19° 40′, till the twelfth, when we came into ten degrees, we conſtantly ſaw ſome though few of the two laſt mentioned kinds of birds; but from that time we had no more ſight of them till the evening of the 16th, when in the latitude of 4° 30′, nearly, we ſaw a different kind larger than the pardelas; but from the ſlow motion of its wings we concluded it to be a land bird. It was at too great a diſtance for us clearly to diſtinguiſh its colours and form. We were, however, notwithſtanding this ſignal, under a neceſſity of ſteering W. when after a run of 102 leagues we made the iſland. The following days we never failed of ſeeing a few of the ſame ſpecies; but on the 19th their numbers increaſed. They were wholly black, except a few brown feathers on the wings. Among theſe birds we obſerved one larger than the reſt, with a long neck, a prominent body, and its whole plumage of a dark brown: it moved its wings ſlowly, and every way reſembled a cormorant. We ſaw him ſeveral times dart down with great rapidity to catch fiſh; and on the 29th in the morning we were entertained with the ſight of great numbers of them, whom hunger rendered very alert in the ſame exerciſe. From the time of ſeeing the firſt, till we were directly S. of the iſland, we ſailed 33 leagues, the greateſt diſtance theſe birds are known to venture out to ſea. On the 20th in the evening, being betwixt ten and eleven leagues from the iſland, we ſaw ſeveral birds reſembling the guanaes already deſcribed; and at ſunſet great flocks of them were flying towards the W. whence we concluded that we were not far from the iſland. Theſe birds, which the French call Fou, and the Engliſh Booby, are about the ſize of a gooſe, have a large and curved wing, all over of a dark brown, and in flying uſe a great deal of motion with their wings; but when they attempt to catch a fiſh, they dive with the ſame rapidity as the guanaes.

About two hours before we made the iſland, we ſaw ſeveral Rabijuncos, a bird, which by always keeping near the ſhore, indicates its proximity. They are about the ſize of a wood pigeon, with a ſhort thick neck, a ſmall head, the whole plumage white, and a long tail in the form of a rabijunco or ruſh, half an inch diameter near the body, tapering its whole length till it terminates in a point, whence it was called Rabijuncos. Theſe birds are never ſeen above eight or ten leagues from the ſhore.

From the time we firſt ſaw the Dorado and Bonito, the laſt increaſed in numbers as our latitude diminiſhed. We now alſo ſaw the Tunny, and a great many flying fiſh. We caught ſome of all kinds; and here it is not unworthy notice, that the Bonitos and Tunny-fiſh bite only from day break till about ſeven in the morning, and again in the evening from ſun-ſet till dark.

CHAP. II.

Nautical Obſervations and Remarks on the Voyage round Cape Horn.

FROM the time of our ſteering weſt, being in the latitude of the iſland, till we were under its meridian, we ſailed 5 deg. 4 min. and a half, though all on board, who had kept an account of the ſhip's way, imagined we were to the weſtward of it; but the variation of the needle convinced us, that our reckoning was not to be depended on, and that the ſhip was much farther to the eaſtward than we imagined; an error owing principally to the motion of the currents, which had drawn us at ſuch a great diſtance from the land; all the French pilots on board the Delivrance agreed in this particular; and ſome related, that when they thought themſelves near the land, they had often found the ſhip above three hundred leagues to the eaſtward of their reckoning. I did not, however, make any correction in my journal on this account; for which I had two reaſons. The firſt, that I might be able to judge of the diſtance the currents had carried us to the eaſtward. The ſecond, was an unwillingneſs to commit a freſh error by making an uncertain correction, as I was not ſatisfied that there were any currents, and conſequently unable to gueſs at their velocity; ſome affirming they had found them very violent; and others as poſitively aſſerting, that they had never met with any. This was the caſe of the three frigates when they entered the South-Sea: and the captain of the Delivrance informed me, that without attending to the currents in going round the cape, in the latitude of 62 degrees, his reckoning perfectly agreed with the time of making land; and that ſeveral Frenchmen had done the like: but, on the other hand, it has happened to ſome, that when they imagined themſelves in the South-Sea by the place of the ſhip according to their reckoning, ſteered N. E. till from the diſappointment of not falling in with the land, at the time expected, had convinced them that they had not weathered the cape; and accordingly ſteering towards the W. they have found their ſuſpicions confirmed by making the coaſt of Braſil, or Buenos Ayres.

ON the 21ſt of May, at one in the afternoon, we were under the meridian of Fernando de Norona, and at above three quarters of a league diſtant to the northward of it. Whereas according to my computation, the frigate was only 29° 56′ E. of the meridian of Conception; but by the modern French map, laid down from the obſervations ſent to the academy of ſciences, in which the longitudes of all places are marked with all the accuracy which diſtinguiſhes the works of that learned body, this iſland lies no leſs than 42°, 32′, 30″, E. of the meridian of Conception; conſequently the difference between my reckoning, and the true longitude of the iſland, being 12°, 36′, 30″, is the diſtance which the currents carried our frigate to the eaſtward, excluſive of her lee-way.

On the 15th of May, namely, before he began to ſteer W. we ſpoke with the Marquis d'Antin, and her captain gave us to underſtand, that according to his reckoning, the ſhip was then 45°, 3′, E. of the meridian of Conception. Whereas the diſtance, according to my account was only 34°, 19′. Thus the ſhip, according to his computation, was 10°, 44′, further to the eaſtward than by mine, and the difference on the ſhip's arrival at the iſland, will be 2°, the diſtance the currents had carried him to the eaſtward beyond what he had judged. The captain of the Delivrance, on the ſame day, made the ſhip 39°, 15′, eaſt of the meridian of Conception; that is 4°, 56′, more than I; and conſequently on reaching the iſland, his account was 7°, 40′, further to the weſtward than the ſhip. Others, who kept a journal on board the Delivrance, differed as much; ſome nearly agreeing with me, namely, thoſe who had made no allowance for the currents; whilſt others approached nearer to the account of the captain of the Marquis d'Antin, having uſed an equation in reſpect to the currents. But every one, at making the iſland, found their reckoning erroneous; the ſhip, according to their accounts, being farther to the weſtward than ſhe really was; but differed in the quantity of that error, according to the different allowances they had made for the ſetting of the currents.

The difference betwixt my account and that of the captain of the Marquis d'Antin, who was one of thoſe who made the ſhip fartheſt to the eaſtward, proceeded from the captain's knowing by obſerving the variation of the needle, that the frigates made more way than the reckoning allowed of, and therefore concluded that a correction was neceſſary, which he performed by adding a proper diſtance, from the journals of others, and thence inferred that the velocity of the currents was conſiderable; but as that really exceeded the allowance he made for it, his ſhip was always to the eaſtward of his reckoning. The captain of the Louis Eraſme found the difference nearly the ſame as the captain of the Marquis d'Antin, who made uſe of an equation. Both, as I have already obſerved, founded their corrections on the variations; differing very conſiderably from that delineated on the charts.

THE great variety of currents met with in ſailing round Cape Horn, being ſometimes ſtrong, ſometimes moderate, and at others ſcarce perceivable, induces me to think that they were not conſiderable in correcting the account. For their velocity being uncertain, it is in fact only committing a voluntary error; and as the variations enable us to gueſs at our longitude within two or three degrees; and as after making uſe of the equation, the place of the ſhip cannot be known nearer the truth, the correction is entirely uſeleſs; and the inference drawn from obſerving the variation, is abundantly ſufficient for ſecurity. I ſay, that the place of the ſhip may be known ſo within two or three degrees; and a more exact conformity between the corrected reckoning and the time of making land would be rather fortuitous than the effect of accuracy, in making the correction. The difference of one or two degrees in the variations, an error unavoidable, may produce in the longitude an error of three or four degrees, or even more, according to the place of the ſhip. Every one on board the three frigates, found their reckoning to the weſtward of the ſhip's true place, though they had made an allowance for the currents, and the difference between ſome of their accounts was not ſmall, as I have already noticed.* This was owing to the like uncertainty in the journals of other voyages they had with them; for the currents being ſtronger at ſome times than others, they who followed the former made a much larger allowance than thoſe who regulated their corrections by the latter; and conſequently their reckonings muſt have been very different. The currents therefore being uncertain, and the journals of thoſe voyages very variable with regard to their velocity, there is no more ſecurity in following one than another, and even if we take a medium between them, there would be no more ſafety in relying upon it, than blindly to follow that which was thought the beſt. However, their utility and even importance cannot be denied, as they inform the navigator of the parts where he muſt expect to meet with currents, and at the ſame time warn him of their variety.

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* There is a ſtrong current to the W. in theſe ſeas, and by the beſt obſervations I could make (at a mean) it is about one mile per hour, but in ſome places much more, eſpecially near the mouth of the river Amazon.

N. B. I generally found the above allowance to anſwer from lat. 4 S. to 5¼ S. A.

One cauſe of the little knowledge we have of theſe currents is, that this voyage is ſeldom made, and leſs by the Spaniards than by any other maritime nation; and though ſince the year 1716 ſeveral French ſhips have ſailed into thoſe ſeas, they have not yet been able to remove this difficulty, and ſettle the times of the ſeveral degrees of velocity of the currents in the different latitudes paſſed through in weathering the Cape. This is indeed only to be expected from long experience and repeated voyages; and in order to this navigators ſhould not make any allowance for their currents in correcting their days works; for the diſtance between the knots on the log-line being truly adjuſted as ours was at forty-ſeven Paris feet and one third, and the half-minute glaſs carefully attended to, the error in the diſtance will be very inconſiderable, and conſequently the drift of the current, on making land, known very near the truth; and this muſt be added to or deducted from the reckoning by account. By purſuing this method we ſhall advance one ſtep towards a more certain knowledge of them.

Though we are not yet able to determine the velocity of the currents, nor the times of their ſetting, yet we can advance one ſtep towards it, namely, that they always ſet towards the E. nor is there a ſingle inſtance to the contrary, unleſs very near the land on the W. ſide of America near Cape Horn; the proximity of the coaſt cauſing there a great variety of eddies, and Terra del Fuego, being compoſed of a cluſter of iſlands, forming as many channels, the courſe of the current is altered according to their diſpoſition; and at a ſmall diſtance from them the meeting of theſe currents is plainly diſtinguiſhable.

IN the account of Don George Juan's voyage inſerted in the ſequel, though his courſe in weathering Cape Horn, was nearly in the ſame latitude as ours, but a month later as to time, and the weather and winds very different, yet no current was perceivable; which confirms what I have already obſerved.

THOUGH the general winds here are towards the W. and S. W. thoſe from the E. are ſometimes known, as we experienced in paſſing between the 57th and 58th degree of latitude, and for three or four days after we leſſened our latitude. This, however, ſeldom happens; and therefore a ſhip bound into the South-Seas when in the latitude of Cape Horn, ſhould keep as near the wind as poſſible, if it be at N. W. or any other intermediate point between the S. W. theſe being the reigning winds in all ſeaſons, taking advantage of the firſt in order to gain the neceſſary latitude, which ſhould be ſomething above 60 degrees, that if ſhe ſhould be obliged to tack with the wind at S. W. ſhe may have ſufficient ſea-room in weathering the Cape; for otherwiſe if the wind ſhould take her ſhort, after two or three days, it would be neceſſary to return again to a higher latitude; and this is, at all times, attended with great fatigue and hardſhip, both on account of the rigour of the climate, and the frequency of ſtorms, attended with the moſt terrible ſeas. It was the middle of ſummer when we came round the cape, yet the ſnow and hail fell very thick, and the cold was proportional. And though when we were between the 57th and 58th degree, there was very little wind, yet we had, to the great fatigue of the ſeamen, a very heavy ſea from the S. W. and W. and ſometimes the ſea run in two or three different directions.

From our leaving the bay of Conception, till 17th Feb. when we were in the latitude of 45° 17′ the differences either with regard to exceſs or deficiency between the latitude by account, and that obtained by obſervation, were inconſiderable: but from that day, the latter was always greater than the former, as will appear from the following ſeries. From the 15th of the ſame month to the 17th, the latitude by obſervation exceeded that by account 18 min. from the 17th to the 20th, 32 min. from the 20th to the 23d, 37 minutes and a half, from the 23d to the 27th, 33 minutes, from the 27th, to the ſecond of March, 43 minutes, and from the 2d of March to the 6th, 20 minutes and a half. We were now according to my computation, 12° 6′ E. of the meridian of Conception, and in the latitude of 56° 44′. After this the difference between the latitudes by account and obſervation began to decreaſe; but ſometimes the latitude by obſervation exceeded that by account, and at other times was leſs. From the ſixth to the ſeventh the difference was four minutes and a half; nor did it exceed five or ſix at the end of three or four days in which we had no obſervation. This evidently ſhews that from the above latitude of 45° 17′ the currents began to ſet to the ſouthward, and when the land parallel to their courſe failed, they ran towards the eaſt, when it was impoſſible to diſtinguiſh them. But that there were ſtill currents, and very ſtrong ones too, ſeems to me beyond doubt; and it is much more natural to think, that the prodigious volume of water which ran towards the ſouth, when there was no longer any land to obſtruct its courſe, ſhould incline towards the E. rather than towards the W. the latter being the quarter from whence the wind proceeded.

ON the 30th of March, being in the latitude of 34° 27′ S. and, according to my account 32° 47′ E. of the meridian of Conception, we came into a current, which ſeemed to ſet S. E. the latitude by obſervation exceeded that by account by 10 or 11 minutes. But from the 21ſt of April, being in the latitude of 25° 9′, and 36° 15′ E. of Conception, the two latitudes agreed, and thus continued till we reached the iſland of Fernando de Norona.

THE variation, of which we ſhall ſoon give a catalogue, gave us to underſtand from the time we were under the meridian of Cape Horn, that the currents carried our ſhips towards the E founding our judgment on the difference between thoſe obſerved, and thoſe given us in the journals of other voyages, conformable to the places where we made our obſervations. And as they may be ſerviceable to others in making the ſame voyage, in order to render them ſtill more uſeful than if I had adapted them to the longitude from my account, as that was not the real place where the obſervations were made, I have corrected the longitude in the manner I am going to explain.

IT being certain from what has been ſaid concerning the currents, that their effects became ſenſible from 45° ſouth latitude in a S. E. direction to the latitude of 56 or 57 degrees; that from thence they continued to run directly E till we were in the latitude of 34° 27′, and 32° 47′ E. of the meridian of Conception: where their courſe turned to the S. E. and continued to run in that direction till we came into the latitude of 25° 9′, and 36° 15′ E. of Conception, where they ceaſed. It will therefore be neceſſary to divide, in all journals the 12° 36′ 30″, which the ſhip was to the eaſtward of my reckoning, in a proportion agreeably to the interval of time between their beginning and ceſſation, regard being had to their velocity in thoſe parts when they were moſt evident by the difference between the latitudes by account and obſervation, and this will give the true place of the ſhip correſponding to the different obſervations.

The obſervations having been made either at ſun-riſing or ſun-ſetting, and the daily reckoning not been adjuſted till noon, according to the common practice at ſea, occaſions, between the longitude determined that day, and that in which the ſhip really was at the time the variation was obſerved, a difference, which ſometimes amounts to a degree or more, I have therefore taken care in the following table to ſettle the longitude and latitude agreeable to the hour when the variation was obſerved.

A Table *of the* Variations *obſerved in the Voyage from the* Bay *of* Conception *to the Iſland of* Fernando de Norona, *in different latitudes and longitudes, the latter being reckoned from the meridian of* Conception.

Days.	Lat. South		Long. from the Mer. of Concep.		Variations.		Times of making the Obſervation.
	Deg.	Min.	Deg.	Min.	Deg.	Min.	
28 Jan.	36	16½	1	8W.	*13	17E.	Evening.
7 Feb.	36	23	9	25W.	10	45	
28	57	41	0	10E.	23	20	
2 Mar.	58	32	4	1	22	14	
8	55	28	16	24	*26	44	Morning.
9	54	57	18	32	20	00	
11	52	42	19	59	18	50	
12	50	57	22	12	18	44	Evening.
13	49	22	23	35	18	32	
14	47	52	24	24	18	42	
26	38	36	34	41	9	0	Morning.
27	37	46	35	49	10	30	
30	34	27	37	11	6	23	Evening.
1 April	33	06	35	19	5	55	Morning.
1	32	42½	34	39	5	45	Evening.
2	32	15	34	27	5	10	Morning.
4	31	30	34	02	6	0	Evening.

Days.	Lat. South		Long. from the Mer. of Concep.		Variations.		Times of making the Obſervation.
	Deg.	Min.	Deg.	Min.	Deg.	Min.	
8	29	4	37	48	4	0	Morning.
16	27	16	46	0	*2	5 W.	Evening.
18	26	48	48	18	*2	15 E.	
19	26	49	49	1	0	40 W.	
20	26	7	48	57	0	30	
Ditto	25	44	48	46	0	15	
22	25	01	48	47	1	30	
22	24	55	48	47	1	18	Evening.
24	24	43	48	44	0	45 E.	
26	24	00	48	48	0	08	
27	23	04	48	14	0	00	
29	21	30	47	10	0	15 E.	
1 May	20	24	46	56	0	30	
2	20	15	47	10	0	05	
3	20	00	47	05	1	50 W.	Morning.
3	19	51	46	45	0	20 E.	Evening.
4	19	34	45	43	*3	00	
5	19	23	45	06	0	20 W.	Morning.
7	18	21	45	02	1	30 E.	
9	15	49	45	11	2	00	
10	13	16	45	20	0	50	Evening.
12	9	34	45	57	0	05	
17	4	10	45	29	0	22 W.	Morning.
19	4	17	43	55	1	41 E.	
19	4	18	43	40	3	25	Evening.
22	3	53	42	32	2	47	
31	3	53	42	32	1	33	

The two laſt obſervations were taken in the harbour of Fernando de Norona; and thoſe marked with an * were not determined with the deſired accuracy, ſome accident intervening at the time of the obſervation.

It will be proper, for mariners unacquainted with the precautions cuſtomary in a voyage little frequented to obſerve, that in this part of the paſſage they may expect to meet with very tempeſtuous ſeas, continual ſqualls of wind and fogs; ſo that it is abſolutely neceſſary in the night and in hazy days to keep a very careful look out againſt the ice, large iſlands of which, breaking from the ſhore, are driven by the wind beyond the latitude of 64°, and ſhips too often meet with them from 55° upwards. They are uſually nearer the ſhore towards the end of winter than in ſummer, when beginning to looſen themſelves from the land, they gradually move from it; and not diſſolving by reaſon of the continuance of the coldneſs of the air, they are always ſeen at higher latitudes than that of 60 degrees. The Hector, a regiſter ſhip in her paſſage from Cadiz to the ſouth-ſea was loſt on one of theſe iſlands of ice; and many others have narrowly eſcaped the like misfortune.

These maſſes of ice and the many eddies of the currents render it adviſeable to keep a good offing at weathering the Cape in the return from the ſouth-ſea; eſpecially as there are ſome iſlands at a little diſtance from the coaſt, reaching to 56 degrees at leaſt. Theſe are at all times dangerous, both from the difficulty of determining with certainty, on account of the currents, the place of the ſhip; and likewiſe from fogs which are there ſo common and thick, that the whole day is as it were turned to night, and the darkneſs ſuch that thoſe on the poop cannot ſee the men on the forecaſtle. Theſe dangers render it therefore adviſeable, that the ſhip in returning to Europe, ſhould always ſtand into the latitude of 58 or 60 degrees.

In paſſing into the ſouth-ſea, a larger latitude even from 60 to 63 or 64 degrees, as the wind will admit, and then ſteering W. 60 or 80 leagues beyond what may ſeem neceſſary by account, will be adviſeable; becauſe if the ſhip ſhould have met with currents, ſufficient allowance would be made for them; and conſequently the great inconvenience prevented of not weathering the cape; which might be the caſe without the allowance of theſe 60 or 80 leagues. This weſtern diſtance, after it appears, by the reckoning that the ſhip has weathered the cape, will be of little conſequence, if we conſider the great advantages gained thereby; it is always better for the ſhip to be obliged to ſail 100 leagues eaſtward, till ſhe makes the weſtern coaſt of

America, than to want but one of being to windward of it; for to gain only this one league, the ſhip muſt go a great way back to the ſouthward, before ſhe will be able to get round the cape; eſpecially as there is little chance of having a fair wind. In a ſubſequent chapter, I ſhall more fully conſider this ſubject, and ſpecify other precautions neceſſary to be obſerved in ſailing on that ocean.

CHAP. III.

Arrival at FERNANDO DE NORONA, *Deſcription of the Iſland.* *

WE now from our reckonings and other ſigns concluded that we could not be at any great diſtance from the iſland we were ſearching for; and accordingly on the 20th of May, when a fog came on with rain, we laid to under our top-ſails, rather from an apprehenſion of overſhooting the iſland than of loſing company or running foul of each other. On the 21ſt, having an appearance of fair weather, the frigates made ſail, and at half an hour after nine, the Louis Eraſme diſcovered the iſland bearing weſt one quarter ſoutherly, diſtance nine leagues, as was afterwards verified by the log-line.

THIS iſland we imagined to be totally deſart; but from a ſuppoſition that for the conveniency of its harbour, ſhips of any nation returning from the Eaſt-Indies might, either for water, or on any other neceſſary occaſion put in there, it was agreed by the captains of the French frigates to go in, and, under Engliſh colours, in order the better to conceal their courſe; and in caſe we found any ſhips of the enemy, to take the beſt precautions in their power for defence. But to our great ſatisfaction, we ſaw, on our approach, two forts with the Portugueſe flag flying, and a brigantine with an enſign and long pennant of the ſame nation. We were the more ſurprized at this, as according to all the accounts we had received, the iſland was a deſart, having been forſaken by the Portugueſe as not ſuſceptible of tillage: but on our arrival we were informed, that the French Eaſt India company had made a ſettlement on it as a convenient place for their ſhips to put in at for refreſhments: but the court of Portugal being unwilling that either the French or any other nation ſhould have a ſettlement ſo near the coaſt of Brazil, obliged them to evacuate it. This reſolution was taken about ſeven years ſince, after which, theſe and other forts were erected, and a colony ſettled on the iſland. §

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* The Portugueze have induſtriouſly ſpread a report of the barrenneſs of this iſland, although it is well known to thoſe who have had the fortune to touch here, that there is not a more fertile iſland in theſe ſeas, nor any one that affords ſuch plenty of neceſſaries, which every ſhip ſtands in need of after a long paſſage. A

We now began to conſider whether it was poſſible to procure any true account of the ſtate of affairs in Europe; or whether Portugal, in the preſent war, might have gone farther than a neutrality. But as this could not be immediately determined, it was thought adviſeable for the three frigates to agree on ſignals of certain import to be made at going into this harbour. In order to get in it is neceſſary to weather the iſland on the north ſide, as the force of the current to the ſouthward is ſuch, that it cannot be done at leaſt under four or five days or more, beating to windward up to that part where the currents do not obſtruct the entrance. Having been previouſly informed of this, when we found ourſelves to the ſouthward, and ſo near as I have mentioned, we ſteered S. W. 5 degrees weſterly, and after ſailing near a league till we weathered the iſland, we ſtood S. ¼ ſoutherly, with the ſhip's head directly towards a large mountain, betwixt two others plainly diſtinguiſhable; but that on the E. ſide was larger than that in the middle, and the other on the W. a high rocky peak, that looks as it were falling towards the E. and on account of its height and figure called the Campanario,|| or the belfrey. The currents here ſet ſo ſtrongly to the weſtward, that after ſeveral tacks, inſtead of gaining ground, we found ourſelves carried further from the iſland; ſo that in order to avoid any further inconveniency, we came to an anchor at ſome diſtance from the proper anchoring place, in twenty-five fathoms water, the bottom mud mixed with ſhells and gravel; about a league and a quarter from the ſhore, fort Remedios, the largeſt of thoſe built for the defence of the harbour, bearing S. S. E. The prodigious ſea here occaſioned by the violence of the wind, and the ſtrength of the current cauſing our frigates to ſtrain on their cables, obliged us to weigh, and ſtand farther into the uſual anchoring-place, beyond which no ſhips are permitted. This is about ⅓ of a league from the ſhore: and here on the 23d of March, the Louis Eraſme anchored in thirteen fathom water, the bottom of a fine white and black ſand; fort San Antonio bearing E. 5 degrees ſoutherly, Remedios, S. ¼ weſterly, Conception S. S. W. 4 degrees weſterly, and Campanario peak S. W. 3 degrees ſoutherly.

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§ In this iſland there is only a garriſon of ſoldiers (which is relieved every ſix months from Pernambuco) except male felons, who are tranſported from the coaſt of Brazil hither, where their ſtations are no better than ſlaves to the garriſon; unleſs they may be proper to act the part of Noevolus in Juvenal's ninth Satire, for here it may be ſaid Αὐτὸς ἐφέλκεται ἄνδρακίναιδος, as there is not a woman on the iſland. A.

THIS iſland has two harbours capable of receiving ſhips of the greateſt burthen: one is on the N. ſide, and the other on the N. W. The former is in every

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|| Church tower, which it much reſembles. A.

reſpect the principal both for ſhelter, capacity, and the goodneſs of its bottom. But both are entirely expoſed to the N. and W. though theſe winds, particularly the N. are periodical, and of no long continuance. Theſe harbours, however, when theſe winds do prevail, are both impracticable, the ſhips being in danger, and all communication with the ſhore entirely precluded by the agitations and violence of the ſurface; for the coaſt being every where lined with rocks, no boat or veſſel can come near it without the greateſt danger of being beat to pieces. And even in the ſeaſon of the eaſterly winds, you cannot land without ſome danger. This interval indeed affords ſome days when the agitation of the ſea is greatly abated, but even in theſe the landing muſt be done with great circumſpection; and at other times the violence of the ſea, and the rocks on all ſides render it utterly impracticable. Thus throughout the whole year this harbour is by no means a deſirable retreat; but happily ſerves on an urgent neceſſity of making land, notwithſtanding the danger or inconveniency that may attend it.

After the Portugueſe had cauſed the French Eaſt-India company to remove from this iſland, they ſecured it to themſelves by fortifications; for beſides the three forts which defend the N. harbour, it has two others for the defence of the N. W. and two in the E. part of the iſland in a ſmall bay, though fit only for ſmall barks, and difficult even to theſe. The forts are all of ſtone, ſpacious and well provided with large artillery. Thus though the whole length of the iſland is ſcarce two leagues, and it does not yield wherewithal to ſupport the garriſon, and the few other inhabitants, it has no leſs than ſeven elegant forts. It is under the government of Fernambuco, from whence it is ſupplied with proviſions and other neceſſaries. But the jealouſy of the Portugueſe, leſt any other nation ſhould get footing on it, and make that the fountain of farther pretenſions, has induced them to ſpare no expence for keeping the forts in a condition to aſſert their ſovereign right againſt any intruders.

The principal fort ſtands on a high ſteep rock waſhed by the ſea, at the foot of which is a cavern, where vaſt quantities of water are continually pouring in without any ſenſible outlet. In this place are heard at ſhort intervals, very dreadful eructations of the wind, which being compreſſed ſtruggles for a vent againſt the torrent of the water, and by filling the whole mouth of the cave in its aſcent, leaves a large vacuity after its diſcharge, which is done with a noiſe reſembling that of a volcano: but neither on the oppoſite ſide of the iſland, nor throughout its whole circuit, is there any place or mark which affords the leaſt room for conjecture, with regard to the other mouth of this cavern; ſo that it is ſuppoſed to be at a great diſtance from it in the ſea.

The barrenneſs of the iſland does not proceed from any defect in its ſoil, which produces every ſpecies of grain, and fruits common in hot climates, as experience has ſufficiently demonſtrated; but from the want of moiſture: for beſides two or three years often paſs without any rain, there is not the leaſt drop of water to be found throughout the iſland except in ſome brooks; and by reaſon of this ſcarcity the plants wither and die away in their growth. The moſt fruitful parts of the iſland unleſs when ſoftened by moiſture from the clouds, becomes as arid and barren as rocks. At the time we were there it was two years ſince they had any rain; but on the nineteenth of May came on violent ſhowers, which continued the whole time we remained near the iſland. The inhabitants uſe the water which they ſave in pits reſembling ciſterns, but this as well as the waters of the brooks on its beginning to rain, grow thick and brackiſh.

brackiſh. The Portugueſe indeed ſay that in the inward parts of the iſland where theſe brooks have their origin, water is never wanting; and that it is clear and wholeſome.

In the inland part of the iſland is a Portugueſe town, in which reſide the pariſh prieſt and a governor, who on advice of any ſhips being in ſight repair to the forts, which are all well garriſoned, there being in fort Remedios alone, while we were there, near 1000 men, partly regulars ſent from Fernambuco, which are relieved every ſix months, and partly tranſports, from all that coaſt of Brazil: an Almojariſe or treaſurer, and a proveditore, who controuls the payments and iſſues of proviſions to the troops and others; which is done with an equity and exactneſs worthy the imitation of Europeans.

The common food of the inhabitants of all ranks, both here and throughout Brazil, is the farina de Pau or wood-meal, which is univerſally eaten inſtead of bread.* It is made of the root called Moniato, of which I have given an account in the deſcription of Carthagena; as well as of thoſe of Name and Yuca. They firſt cleanſe it and then macerate it in water, till the ſtrong and noxious juice in it be entirely extracted; then grate or grind it into meal; which having again ſoaked in ſeveral waters, they dry, and then eat it with a ſpoon, or mix it with other foods. They are ſo habituated to it, that even at a table where they have wheat bread at command, with every mouthful of it they take a little of this meal. Beſides this flour, which is little more than wood meal or ſaw duſt, both with regard to taſte and ſmell, they eat a great deal of rice and ſugar-cane, brought from Fernambuco.‡

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* Caſava, in Portugueſe called Mandioc, which is a very nouriſhing food, and the beſt ſubſtitute for bread I ever met with. A.

‡ N. B. This town ought to be written and pronounced Pernambuco. A.

Here are two tranſports belonging to the king of Portugal, for bringing proviſions and ſoldiers, the latter of which is done ſo methodically, that the time when they are to leave Brazil is ſettled: and thus while one is coming towards the iſland, the other is returning with the late garriſon.

After the ſecond ſettlement of the Portugueſe here, beſides the little plantations which was one of their firſt cares, they alſo brought over cows, hogs, and ſheep, in order to breed thoſe uſeful creatures; and as a ſmall quantity of fleſh ſerves the Portugueſe, they are, even in this barren ſoil ſo greatly increaſed, that during our ſtay here we had the pleaſure of victualling our crews with freſh proviſions; and at our departure took on board a quantity ſufficient to laſt us for ſeveral days.

These harbours or roads abound in fiſh of five or ſix different ſpecies: and among theſe are lampreys and Morenos; the laſt are of an enormous ſize, but neither of them palatable. At the bottom of this harbour is taken a fiſh called cope, from its triangular figure. It has a ſnout not unlike that of a hog; and its whole body incloſed in one bone reſembling horn, within which is the fleſh, intrails and other parts. On the two upper ſuperficies it is covered with green ſcales, and underneath with white. It has two ſmall fins like other fiſhes, and its tail which is horizontal, is alſo ſmall. On being taken out of the water it immediately emits from its mouth a greeniſh froth of an inſupportable ſmell, and which continues for a conſiderable time. Some of our people who had ſeen this fiſh in other parts affirmed, that its fleſh is of ſuch a poiſonous nature, as to cauſe the bodies of thoſe who eat, though but moderately of it, to ſwell till they burſt. But the people on this iſland were as poſitive to the contrary, and affirmed it from their own experience.

They

They however make uſe of this precaution before they eat it, namely, of laying a great weight on it, that all the malignant particles might the better ooze out in the foam: and after keeping it a whole day in this manner, they open the hard ſhell within which it is incloſed, boil it till about half ready, and then ſhift it into another water. By theſe precautions they affirm that all the noxious particles are extracted. But, in my opinion, this troubleſome proceſs is thrown away, the taſte of its fleſh not being at all anſwerable: and were it even in any degree palatable, ſurely the remembrance of its fetid ſmell muſt diſguſt the ſtomach.

During the ſeaſon in which the turtles lay their eggs, namely from December to April, the ſhores of the whole iſland are covered with them; after which retiring into the ſea they diſappear, as was the caſe when we were at Norona. In theſe months the winds are at N. and N. W. and from May forward they ſhift to the E. ſometimes inclining to the S. E. and at others to the N. E. The latitude of this iſland, as taken by ſeveral French pilots, at the time it was in poſſeſſion of that nation, is 3° 53′ S. and thus it ſtands in the new French map; and lies 33° W. of the obſervatory at Paris. Its diſtance from the coaſt of Brazil is betwixt 60 and 80 leagues; but this is not preciſely determined, the French map placing it 60 leagues E. of it, whilſt the Portugueſe pilots belonging to the tranſports, and who, conſequently, ſhould be well acquainted with the paſſage, judge it to be 80 leagues. By taking a medium betwixt the two, the diſtance will be 70.

On the frigates coming to an anchor in the bay, and all our apprehenſions diſſipated by a certainty that the Portugueſe poſſeſſed this iſland, we took in our Engliſh colours, and hoiſted French; and ſucceſſively ſaluted the Portugueſe flag, which was anſwered by all the three forts in the bay. Afterwards an officer of the Marquis d'Antin was ſent aſhore with compliments to the governor, in the name of the captains and maſters of the frigates. After a very polite reception, the governor ſignified to the officer that his duty obliged him to be fully informed what frigates they were, whence they came, and whither they were bound; and that he deſired the captains would ſend him a written account, together with their commiſſions, invoyances and clearances. And this indiſpenſible demand being complied with, they might depend on all the friendly offices within his power. This was immediately done: and on his part, after an attentive peruſal of the ſeveral papers, being ſatisfied with their contents, he wrote a very obliging letter to the captains, offering them whatever the iſland afforded: for beſides his own perſonal diſpoſition to act up to the laws of hoſpitality towards all who ſtood in need of ſuccour, he and all the governors of Braſil had expreſs orders in their commiſſions from their ſovereign to ſhew all manner of friendſhip to any ſhips belonging to other ſtates, which might put in to their ports; and likewiſe to furniſh them all equally with whatever they wanted, provided it was not detrimental to his people or veſſels, nor give juſt cauſe or complaint to any other nation at war. The French captains were not wanting to ſhew their ſenſe of ſuch humane and prudent expreſſions; and the generous governor ſoon ſhewed they were ſincere, by furniſhing whatever proviſions we required as neceſſary, ordering a number of Indians to aſſiſt us in watering, and the tranſport to receive on board ſo much of the cargo of the Delivrance as was neceſſary to lighten her, in order to her being caulked and careened, that ſhe might perform the remainder of the voyage with ſafety and diſpatch.

Notwithstanding all the civility and friendſhip of the governor in every particular, we were in the ſame condition in the iſland, with regard to recreation and amuſements, as if we had been at ſea; being hardly permitted to go a-ſhore; the Portugueſe from their natural ſuſpicion and jealouſy obſerved their orders with ſuch preciſe ſtrictneſs, that to go from the ſhore to the principal fort where the governor of the iſland reſided, was the only walk allowed: and in this he who went a-ſhore was attended with three or four ſoldiers, who never left him till he returned to the boat, which was immediately ordered to be put off. Guards were placed in all quarters of the harbour; and on ſeeing any boat, they immediately ran to the place they ſuppoſed ſhe intended to land at, in order to accompany the paſſengers. § Theſe diſagreeable precautions, however, are to be imputed to the abrupt ſettlement made on this iſland by the French Eaſt India company, when the Portugueſe retired from it; and now thinking it a place of great importance to the French, they preclude them from any acquaintance with the inland parts of the iſland, leſt ſuch a knowledge might facilitate the execution of their ſuppoſed deſigns, namely of taking it from the Portugueſe, and fortifying themſelves in ſuch a manner as not to be eaſily diſlodged.

§ The Portugueſe are very cautious in this reſpect, fearing ſtrangers ſhould know the fertility of an iſland, ſo near to their rich ſettlements the Brazils, from which iſland a contraband trade might be carried on, if there were a ſettlement, or the governor could be bribed. But they take care to make the moſt dependent officer governor, and prevent the iſland from properly becoming a ſettlement, by not permitting a woman to live on it. A.

An Account of ſome Parts of the Brazils.

By Mr. John Adams.

IN this place it will not be amiſs to take notice of ſome parts of the Brazils, which are quite unknown to the Engliſh, except their names.

The moſt remarkable places to the northward of Pernambuco, are Rio Grande and Rio Paraiba, both which are yearly viſited by a great number of ſmall veſſels, the crews of which are employed in killing cattle; more for the ſake of their hides, and tallow, than their fleſh; of which, neverthelefs, they jerk great quantities, for the uſe of ſuch ſhips as ſail from Pernambuco, Bahia Todos os Santos, and Rio de Janeiro to Guinea. The inland parts up theſe rivers are inhabited by Indians, called Tapuyes; many of whom ſend yearly large droves of cattle (through the Tupique nation, which extends from the ſource of Rio St. Franciſco, in lat. 8° S. to that of Rio Doce, in 20° S.) to Bahia Todos os Santos, and Rio de Janeiro, where they ſell them for three or four cruſádoes a-piece (a cruſado is about 2s. 8d. ſterling), or exchange them for knives, hatchets, &c. or coarſe baize; for a yard of which they will give a good beaſt. The reader who deſires to have a particular account of theſe Indians, I refer to authors who have written the deſcription of this part of the world, and treated of their cuſtoms and manners at large; I intend only to touch upon ſuch matters, as, I believe, are at preſent unknown to my countrymen.

Pernambuco, or Olinda, is a large trading town, and the capital of this part of Brazil; it has a governor ſubordinate to the vice-roy at Bahia Todos os Santos; but as this town is pretty well known to geographers, I ſhall mention only a recent piece of Portugueſe policy, that was acted here, to keep the Engliſh from the knowledge of theſe parts; I think it was in the year 1761. Two India ſhips appeared in the offing (one was the London, Capt. Webb, the other I have forgot) where they brought to, and ſent their boats on ſhore to deſire leave to come within the reciffe (that is the ledge of rocks which form the harbour) but the governor had ordered the pilots to ſay, there was not water enough on the bar, notwithſtanding there is no leſs than twenty-four feet at low water mark. The Indiamen were therefore obliged to cut their cables (it being impoſſible for them to weigh where they had brought to), to leave their anchors behind them, and ſtand away for Bahia, where they met with a more favourable reception.

To the ſouthward of Pernambuco is the bay of Vaſabarris, into which the river St Franciſco diſembogues itſelf, and occaſions ſuch eddies to the diſtance of three or four leagues from the land, that few veſſels which approach near the ſhore in this bay eſcape ſtranding. About thirty leagues inland the river St. Franciſco loſes itſelf, running under ground for ſeveral miles, and again makes its appearance. I believe there is no river in the world of this breadth that has ſuch a ſubterraneous paſſage. There are ſeveral villages on the banks of this river, and large plantations, from which the inhabitants ſend yearly large quantities of ſugar, tobacco, and mandioc to Pernambuco, which commodities they exchange for cloathing, and implements of huſbandry. The bar of the river has not above eight feet water on it, which obliges them to uſe ſmall ſchooners for the conveniency of exporting their goods.

To the ſouthward of St. Franciſco lies Seregippe del Rey, of which we have a good account in moſt modern books of geography; I therefore proceed, to Rio Real, which, if it were not for the bar at the entrance, on which there is but ten feet water, would be an inlet to the moſt fertile and pleaſant part of the Brazils. Over the bar there is room enough, and depth of water ſufficient for the whole navy of England to ride in ſafety. About 4 leagues above the mouth, this river divides itſelf into four large branches, one running N. N. W. called Rio Fundo; another N. W. navigable for any veſſel that can get over the bar, up as far as the towns of St. Lucia and St. Euſtatia, from the latter of which it takes its name; a third called Rio de Pao Grand, or Great-Timber river, which runs W. N. W. The main branch, which runs W. S. W. is alſo navigable as far as the town of Badia, about twenty leagues from the mouth. On the banks of theſe branches there are many fine plantations, and ſmall villages, which ſend great quantities of ſugar, tobacco, and mandioc to Bahia, or Pernambuco, as the wind permits, which, on this coaſt blows N. E. from October to May, and the reſt of the year S. E.

THIS river runs into the ſea through four channels, formed by three ſmall ſandy iſlands, lying in the mouth of it. The three ſouthernmoſt channels are very ſhallow, and have not above ſix or ſeven feet on them at high water, nor above two or three feet at low water.

THE above-mentioned bar is ſand, and often ſhifts eſpecially after the land floods, which are very great about December, when there are twelve or fourteen feet water on that part of the bar over which the northernmoſt channel directs its courſe. As ſoon as you have paſſed the bar, there is ſeven or eight fathom water, and at the diſtance of a quarter of a mile from it twenty or thirty fathom. The wind on this coaſt always blowing from the E. the ſurge and current running to the W. and moſt of the rivers diſemboguing into the ſea to the E, are the chief cauſe of the many bars on the coaſt of South-America: for wherever the two oppoſite currents deſtroy each other, there a bar is formed, which is nearer to, or farther from the ſhore according to the rapidity of the river.

From the above conſiderations I thought it practicable to open a paſſage for large veſſels up the river Real, and propoſed it to the inhabitants. My ſcheme was to have ſtopped up the three ſouthernmoſt channels, and have thrown the whole current of the river down the northernmoſt, which would have removed the bar farther out to ſea into very deep water, and in all probability have opened a paſſage for the largeſt ſhips into the fineſt harbour in the world. From the beſt eſtimation I could make, it would not have coſt 1000l. But through indolence, or ſome ſecret cauſe, it was rejected.

About twelve leagues to the ſouthward of Rio Real is a ſmall harbour, called Torre Garcia de Avilla, which is defended by four pieces of cannon: the town lies about a mile above the port, on the higheſt land on this coaſt, and is the beſt for a ſhip to make, that is bound to Bahia while the N. E. wind blows; as the coaſt is bold as far as Punto de Tapoas, which is the eaſternmoſt land before you bear away for Bahia Todos os Santos, and may be known by a number of cocoa-nut-trees, which grow upon it. Give this point a good birth, and approach not within a league of the ſhore till the caſtle of St. Anthony, at the entrance of the bay, bears N. by W. then there is no danger till you are near the round fort, which before you come to, you may find anchoring groundenough in what depth you pleaſe.

The city of Bahia Todos os Santos dedicated to St. Salvador, by which name it is ſometimes known, lies up the bay about two leagues from Point St. Anthony on which the fort ſtands. The mouth of the bay, which is about three leagues wide, is formed by the main land on the ſtarboard ſide and by the iſland Taporico on the larboard. A ſhip may keep over on the larboard ſide within three quarters of a league of the iſland, and be pretty well out of the reach of the guns of fort St. Anthony, or St. Maria, which lies a little above; but I would adviſe thoſe who may be neceſſitated to ſail into this bay, in ſpite of the ſaid forts, to keep the lead going and to come no nearer the iſland than twelve fathoms water, as the ſhore is very foul.

THIS city is ſituated on an high eminence; at the bottom of which, on the ſtrand, is a large town called the Praya, which properly is the port, but generally they are collectively taken, and called Cidade de Bahia. The city and town are connected by three ſtreets, which run ſlantwiſe up the eminence, as it would be almoſt impoſſible to go right up: in two or three places they have long pulleys (inclined planes) two hundred yards in length, built up the ſide of this ſteep eminence, to draw up the goods from the Praya, where they have large warehouſes. Here is a ſpacious market-place, ſurrounded by piazzas, under which is kept a continual fair for goods, brought in from all parts of this country. At the firſt arrival of the fleet from Portugal it is difficult to find room to ſtand, as the inhabitants of the whole city flock down to market to buy up the private trade, which the ſailors bring over; every one of whom is allowed a certain quantity according to his ſtation.

AT the ſouthernmoſt part of the Praya is a conſiderable dock-yard, where they build large ſhips, or men of war. They alſo prepare vaſt quantities of timber for the purpoſe, in order to ſend to Portugal by thoſe men of war that convoy the fleet home. Is it not a pity our men of war from the coaſt of America are not loaded home with ſuch a cargo?

THE city of Bahia is pretty regular, and as well laid out as the unevenneſs of the hill on which it ſtands will permit. But I wiſh I have not exceeded my firſt propoſal, as it is difficult to ſuppoſe, that a city and bay ſo well known, ſhould have eſcaped the pens of all the modern geographers. All thoſe which I have ſearched are, however, ſilent as to any remarks on this place.

The next place on this coaſt is Rio Camamu, a large river, about twenty-five leagues to the ſouthward of Bahia; here are numbers of ſmall towns and villages, and the banks of this river are the beſt inhabited of any part of the Brazils. There are not leſs than three or four hundred ſmall veſſels employed by the inhabitants to convey their commodities to Bahia and Rio de Janeiro. The Jeſuits formerly held a great traffic with this place, and ſent a large frigate loaded from theſe parts to Paraguay, but with what goods I could never learn; the ſource of this river is in the centre of the gold mines, from which circumſtance it is eaſy to gueſs at ſome part of their cargo.

From hence to the Ilheos is a bold ſhore; afterwards very rocky and ſhoaly, till you get to the ſouthward of the Abrolhos. Off the mouth of Rio Grande there is not above6 or 7 fathom water at the diſtance of 10 leagues from the land. On this coaſt there are many little harbours, and rivers whoſe borders are well inhabited; the chief of which are des Contas, los Ilheos, Rio Grande, and Porto Seguro; but their entrances are very dangerous without a ſkilful pilot, and their trade the ſame as at Camanu. I proceed, therefore, to Rio dos Caravellos, into which the Abrolhos forbid an entrance without the aſſiſtance of a ſkilful pilot. On the banks of this river are ſeveral little towns and villages, at one of which they build veſſels of one hundred tons burthen; this river was well known to the Jeſuits, and the moſt convenient place they could have thought of, if they had had a mind to finger any of the gold before it came under the inſpection of the king's officers; for moſt of the Bandeiras, or companies that go in ſearch of new mines, or to ſeek for gold in the torrents between the inland mountains, aſcend this river as far as they can in their canoes, and return with their acquiſitions the ſame way. Thoſe Bandeiras likewiſe which go up the country y the way of Rio Grande, or Rio Doce, often return by this route to avoid the officers, who are ſtationed at the mouths of the laſt mentioned rivers. As I never happened to ſail into any of the rivers or harbours between this and Rio de la Plata, but ſuch as have been deſcribed by other writers, except Rio Doce, I ſhall conclude with a remark or two concerning this place. I believe it to be one of the moſt rapid ſtreams in the world; the current is ſo ſtrong, that the water may be taken up freſh at the diſtance of a league from the mouth of the river. Many veſſels built upon this river have ſailed out of it, but none ever returned; as it would be impoſſible to ſtem the current. There are many plantations on the banks of it, the planters of which convey their produce by land to a branch of the Janeiro, by which, with the help of canoes, they ſend their goods to the city.

In the back ſettlements, from Rio Grande to Rio Doce, the inhabitants are much harraſſed by the Indians, who often maſſacre the planters, and plunder their plantations.

These few remarks will not be diſagreeable, I hope, to the readers of a voyage, which gives undoubtedly the moſt authentic account we have of South America. I own they have little pretenſion to the beauty and accuracy of expreſſion ſo conſpicuous in this excellent performance, but they have the merit of novelty to recommend them. Such as they are, unbiaſſed by intereſt or any private view, I give them to the public, together with ſuch other remarks, as, upon a very careful peruſal of the work, I have inſerted, by way of notes, at the requeſt of the proprietor.

CHAP. IV.

Voyage from FERNANDO DE NORONA. *Engagement with two Engliſh privateers.*

ON our arrival in the harbour of this iſland, our firſt care was to repair the Delivrance; but upon examination, her condition was found ſo bad, that to have entirely compleated her would have occaſioned too great a delay. It was therefore thought proper to repair her only ſo far, as was neceſſary againſt the danger and fatigue of being continually at the pump; and accordingly, when we came to ſea we found, that inſtead of repeating that fatiguing operation every half hour, once in an hour was now ſufficient.

HAVING taken in the neceſſary ſupplies of wood and water, with ſome calves and hogs, it was determined to proceed to ſea with all expedition, in order to retrieve, in ſome meaſure, the delay which the repairs, however ſlight, of the Delivrance had occaſioned. June the 10th at ten in the morning the frigates got under ſail, and ſteered N. ¼ eaſterly till June the 18th, when they were in the latitude of 8 deg. 12 min. N. and 43 deg. 27 min. E. of Conception, having croſſed the line on the 12th under the meridian of 42 deg. 45 min. E. of that city, and 32 deg. 47 min. W. of Paris. We had freſh gales at S. till we came into the latitude of 6 deg. N. where the wind abated and became variable; ſometimes at N. N. E. and N. E. and at other times E. S. E. and E. N. E. but never blowing with any ſtrength till the 8th of July, when, having ſteered N. E. and N. we found ourſelves in 34 deg. 31 min. N. lat. and 31 deg. 23 min. E. of Conception, where what little wind we had ſhifted to S. S. W. and S. W. From the 8th to the 31ſt of July we ſteered N. E. and N. E. ¼ northerly, except three days, when we ran E. N. E. and one day N. W. ¼ northerly, being forced to alter our true courſe by the winds, which veered to the N. and N. E.

On the ſecond day after leaving the iſland, we loſt ſight of all birds of any kind, but ſaw great numbers of flying fiſh and bonitos. On the 13th of June in a clear night and ſettled bteeze at S. E. without the leaſt appearance of any diſagreeable change, we were ſurprized by a ſtorm of wind and rain, that all we could do was to bear up under our courſes. It was indeed too violent to laſt; and accordingly about an hour after the weather cleared up. On the 15th we began again to ſee Tunny-fiſh in large ſhoals; and the 16th it was calm intermixed with gentle breezes and ſhowers, till the 17th. The ſame weather continued the 18th and 19th, with now and then thick clouds in the horizon, which we obſerved afterwards to go off in violent ſhowers.

On the 20th of June in the lat. of 9 deg. 28 min. N. we ſaw a bird, the only one which had appeared ſince our departure from the iſland. It was ſomething larger than the Pardela, of a dark brown colour, except the breaſt and lower parts of the body, and the wings remarkably long. On the 22d ſqualls and ſhowers. On the 24th we ſaw great numbers of Tunnies, flying fiſh and cavallas, a fiſh not unlike a mackrel; and a bird of the ſame kind as that we ſaw on the 21ſt.

On the 27th, being in 17 deg. 57 min. N. lat. the ſea was covered with a kind of weed called Sargaſo, which pickled, is by many thought equal to Samphire: and along this verdant ſurface our courſe continued till the 7th of July, that is, till we were in the lat. of 33 deg. 31 min. when little of it was to be ſeen. Whereas for ſome days before the whole ocean within ſight was, as it were, covered with it. During this time we alſo ſaw ſome birds; but particularly in the afternoon of the 29th of June, and on the 30th in the morning. Some of theſe were of a middling ſize and of a dark brown colour; alſo ſome black Rabiahorcados; and on the morning of the laſt day we alſo ſaw ſeveral rabijuncos. On the 1ſt of July we again had ſight of the above-mentioned brown birds, but without any of the other two ſpecies: and on the 3d, being in 27 deg. 34 min. latitude, and 32 deg. 27 min. E. of Conception, we ſaw no kind of large fiſh, though abundance of the flying fiſh.

On the 8th, being in 34 deg. 31 min. latitude, we again had ſight of the Dorados; and likewiſe ſaw a middle-ſized bird all black, which for a long time continued hovering about the ſhips. On the 9th in the evening, we were ſurprized with the appearance of a ſmall whale; and on the 10th in the morning, being in the latitude 36 deg. 57 min. and 32 deg. 6 min. E. of Conception, we ſaw ſeveral birds of a middling ſize, with long and broad wings, the neck, head and tail black, and the other parts of the body white.

On the 10th, being in 36 deg. 57 min. latitude, and 32 deg. 6 min. E. of Conception, by my reckoning, according to which, and likewiſe in the Dutch and common French chart, the iſland of Flores, one of the Azores, lay E.N.E. 2 degrees N. diſtance 112 leagues. In the French chart are ſet down ſome iſlands, which, as being of later diſcovery, do not occur in the Dutch: among theſe is Santa Ana bearing weſtward five leagues; but by the new French chart, the iſland of Flores lay E.N.E. 5 deg. eaſterly, and at the diſtance of 167 leagues. All this morning we had a cockling ſea coming from the N. W. and by W. which we conjectured might proceed from the proximity of the iſland of Santa Ana, as by our reckoning it muſt have been very near us.

On the 17th being in 41 deg. 49 min. latitude, and 36 deg. 48 min. E. of Conception, we were amuſed with the ſight of vaſt flights of birds, of a middling bigneſs, and of a brown colour intermixed with black, reſembling on the whole the Cormorant. On the 18th we alſo ſaw great numbers of the ſame birds; but from the 19th, when we were in 42 deg. 53 min. latitude, and 39 deg. 23 min. E. of Conception, they gradually decreaſed, ſo that we ſaw very few of them.

From the time of our leaving the iſland of Fernando de Norona, till we reached the equinoctial, the S. latitude by obſervation every day exceeded that by account ten or eleven minutes, that is, the ſhip did not in reality, make ſo much way as ſhe ſeemed to do by the log-line. But after paſſing the equator, the latitude by obſervation continued ſtill to exceed that of the reckoning taken from the log-line: and as we ſtood directly north, it appeared that the ſhip's real way exceeded the diſtance meaſured; whence this corollary may be deduced, that in the ſouthern hemiſphere near the equinoctial, the waters tend ſouthward; and that, on the contrary, in the northern hemiſphere the current runs northward; which agrees with the accounts given of thoſe, who in the voyages to the Eaſt-Indies have ſeveral times had occaſion to croſs the line. Till the 24th of June the courſe of the waters continued northward 10 or 11 min. a day; but when we reached 14 deg. 22 min. the latitude by obſervation began to correſpond with that by account.

The differences between the latitudes by account and obſervation can only be attributed to the courſe of the water in the two hemiſpheres; and not to any defect in the meaſurement by the log-line: for were that the caſe, how can it be reconciled with this known circumſtance, that the way of the ſhip whilſt in the ſouthern hemiſphere was in reality leſs than it appeared by the log-line: and on coming into the northern hemiſphere, it was quite the reverſe. As little can it be charged on any defect in the inſtruments; for beſides the daily agreement of all con-

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cerning the difference, when we were got out of theſe oppoſite courſes of the water, the latitude by obſervation agreed with that by account. The preceding reaſons alſo ſhew, that the perſon who tended the log-line was not careleſs; for if any error had been committed here, the difference would have continued, the management of it having on all occaſions been entruſted to the ſame perſon, who beſides his ſobriety and attention, was a complete artiſt. But the above cauſe is further evident from the continual uniformity of the diſtance, never exceeding ten or twelve minutes; or decreaſing betwixt ten and twelve minutes every day: and that if on any day the latitude had not been obſerved, on the day following the difference was found double; a circumſtance that not only proves the reality of the currents here, but likewiſe confirms what we have ſaid in chapter 2d, concerning thoſe in our paſſage from Conception to this iſland, excluſive of thoſe which will be mentioned in the ſequel.

On the 7th of June, being in 33 deg. 31 min. latitude, and 31 deg. 37 min. eaſt of the meridian of Conception, we ſuddenly felt a ſtrong motion of a current, which the more ſurprized us, as we perceived nothing of that kind the day before, tho' in the ſame latitude. However, we were confirmed that we were not miſtaken by our reckoning the following days, till the 11th, the latitude by obſervation daily exceeding by 13 or 15 min. that by account; but on the eleventh they again agreed. On the 12th in 39 deg. 44 min. latitude, that by obſervation again proved different to that by account, the former being leſs than the latter, by 13 min. And on the 13th the difference continued to be the ſame. Thus the courſe of the current continued leſſening the ſhip's way, by carrying us ſouthward till the 15th and 16th, when the difference became greater, but in an oppoſite direction; that is, the currents carried us northward. On the 17th they continued the ſame courſe, but on the 18th, we found 27 min. difference; having ſuddenly entered into waters of a different courſe, that is, they again carried us ſouthward. Had this variety of differences been reported only by a ſingle perſon, doubtleſs from the ſtrangeneſs of the phænomenon, it would have been looked upon as a miſtake in the obſervation; but the reality of theſe dangers does not now admit of any rational doubt. The obſervations were taken by ſeven perſons, each with a different inſtrument, one of which was a quadrant invented by the celebrated Mr. Hadley, and all agreed in the differences. From the 18th day of the month to the 20th the difference betwixt the latitudes by obſervation, and that by account, proved to be 40 min. which was near double of that which had appeared in the courſe of the 18th; and on the 20th we were in the latitude of 43 deg. 8 min. and 38 deg. 57 min. E. of the meridian of Conception.

NOTICE has already been taken of the indifferent condition of the Delivrance at our departure from the iſland of Fernando de Norona. And thus it continued till the 16th, when, whether it proceeded from the working of the ſhip or any other cauſe, the water increaſed ſo faſt that the ſhip was reduced to that diſtreſs, which had been the chief occaſion of our putting into the above iſland, and of our long ſtay there. On the 20th it increaſed upon us in ſuch a manner that the pumps were kept continually going the whole night; but on the 21ſt it ſuddenly abated to near a fourth part of what it had been the day before; a moſt ſeaſonable relief to the ſhip's company ſpent with a fatigue, which their fears rendered ſtill more painful. We obſerved that the water continued to decreaſe from the time of our getting into the ſargaſo or weeds, ſo that on the 27th the ſhip ſcarce made an eighth part of the water as on the 20th. This happy change could be attributed only to the ſargaſo ſucked into ſuch ſeams as were open: and this farther appeared by ſeveral pieces of it thrown out by the pump; beſides a conſiderable quantity of the weed was ſeen ſticking to the outſide of the ſhip's bottom. But on the 29th the water began again to increaſe, and ſoon after abated; in ſuch variations it continued during the whole voyage. And we according to its ſtate, fluctuating betwixt hope and fear.

On the 21ſt of July, about ſix in the morning, being in 43 deg. 57 min. latitude, and 39 deg. 44 min. E. of Conception, we diſcovered two ſail within three leagues of us; bearing E. N. E. The rays of the ſun had hindered us getting ſight of them ſooner. They ſtood to the S. W. and our three ſhips kept on together N. E. without altering their courſe till ſeven in the morning, when being within little more than cannon-ſhot of each other, the largeſt of the two fired a gun with ſhot, and at the ſame time both hoiſted Engliſh colours, our frigates alſo formed a line, though little in a condition for fighting; for beſides being weakly manned, and the want of arms and ammunition, they had no nettings for ſecuring the men, ſo that both the quarter deck and forecaſtle were expoſed.

We, however, after the enemy had hoiſted their colours, continued ſailing in a line, but ſtill in our proper courſes, till the ſmalleſt of the Engliſh ſhips bore down upon us, and fired ſeveral ſhot to oblige us to hoiſt our colours; on which at half an hour after ſeven a fire both of great guns and muſketry began on both ſides; and at eight o'clock the ſhips were within piſtol ſhot of each other.

The force of the three French frigates was this, the Louis Eraſme carried twenty guns; eight on the quarter deck of eight pounders, and the twelve on the fore-caſtle ſix pounders, and had betwixt ſeventy and eighty perſons on board, ſeamen, paſſengers and boys. The marquis d'Antin alſo carried ten guns on a ſide, the five aftermoſt of ſix pounders, and the five forward of four; and had aboard about fifty or fifty five perſons. La Delivrance was ſtill ſmaller than the other two, having only ſeven four pounders on a ſide, and all the perſons on board did not exceed fifty one.

THE enemy who afterwards proved privateers, were conſiderably ſuperior in force. The largeſt of them called the Prince Frederick, commanded by captain James Talbot, carried thirty guns, twenty four of them being twelve pounders, beſides croſsbar ſhots which ſtuck in our maſts and ſides, and ſix ſix pounders on the quarter deck. The name of the ſmalleſt privateer was the Duke, captain Morecock, had ten guns on a ſide, and theſe likewiſe twelve pounders, beſides padereros on both, which did great execution on our rigging. The Prince Frederick to all appearance keeping a continual fire both with the great guns and ſmall arms, could not carry leſs than two hundred or two hundred and fifty men, and the complement of the Duke from the like circumſtances we concluded to be about one hundred and fifty or two hundred.

THE fight was maintained with great reſolution and alacrity on both ſides, though under this conſiderable diſadvantage to the French, that one broad ſide from the enemy did twice the execution of one from their ſhips: and as for muſketry, with which the Engliſh were well furniſhed, and kept an inceſſant fire, all that the French could uſe, was about twelve or fourteen on board each ſhip, it being preſent death for any one to ſhew himſelf on the forecaſtle, and a muſket was what very few on board knew how to make uſe of. At length, about half an hour after ten the marquis d' Antin, which was in our rear ſtruck to the largeſt of the enemy, with which ſhe was engaged, after loſing her captain, who died encouraging his men with the ſame vigour that he had begun the action. And however reluctant they who ſurvived were to the ſurrender, it was now become of abſolute neceſſity, the ſhip having received ſo many ſhot betwixt wind and water, that ſhe was on the point of ſinking.

The captain of the Delivrance, which was the headmoſt ſhip, ſeeing one of our company taken, and judging from this diminution of our force, there was ſtill leſs hope of a ſucceſsful event, he prudently crowded ſail, that whilſt the enemy's ſhips were taken up with their prize, that he might get from them; for no ſooner had the marquis d'Antin ſtruck her colours, than the leaſt of the enemy's ſhips withdrew from the action which ſhe had alternately maintained with the other two, in order to ſecure the prize, whilſt the larger was to renew the fight. It was half an hour after eleven when the Delivrance thus began to ſeek her ſafety in flight: the Louis Eraſme could not heſitate to follow her example, but the largeſt of the Engliſh privateers was not long in coming up with her, and by the ſuperiority of their force, and the vigour with which they exerted it, ſoon laid her under a neceſſity of ſurrendering, though not till the worthy captain had been wounded, ſo that he died the following day. The two privateers being now taken up each with its prize, and the S. E. wind freſhening, favoured the eſcape of the Delivrance, which ſtood N. E. and at four in the evening got quite out of ſight both of privateers and prizes.

The cargoes of the marquis d'Antin and the Louis Eraſme, thus taken, were valued at three millions of dollars, two in coin, gold and ſilver, and ingots, or wrought plate. The other conſiſted in cacao, which was the principal part of her lading; ſome Quinquina and Vigonia wool.

CHAP.

CHAP. V.

Voyage of the Delivrance *to* LOUISBURGH *in l' Iſle* ROYALE *or* CAPE BRETON, *where ſhe was alſo taken.*

THE captain of the Delivrance, after this, in all appearance, fortunate eſcape, conſulted with his officers what courſe was moſt adviſeable to ſteer. Among them was one who had often been at Louiſburgh in the iſland of Cape Breton, near Newfoundland; and had a perfect knowledge of the ſituation and nature of the place. He likewiſe informed us, that in the beginning of the ſummer, two men of war were every year ſent thither, to carry money and troops for that place and Canada: and likewiſe to protect the cod-fiſhery.

As this was the conſtant practice in time of the moſt profound peace, it was natural to ſuppoſe, that in a war with a maritime power, the number of ſhips would be encreaſed: at leaſt, this precaution had never been omitted in the laſt war under Lewis XIV, the place being of the utmoſt importance to France, as the key of Canada, the moſt ſecure port for the fiſhery, and carrying on a very conſiderable commerce with the iſlands of St. Domingo and Martinico. Theſe reaſons and this courſe appearing leſs dangerous than that towards the coaſt of Spain, determined the captain to purſue what he thought the ſafeſt method, and make for Cape Breton: beſides, the condition of our ſhip ſcarce permitted any choice, as affording little hopes that ſhe ever would be able to reach any port in Spain. We had likewiſe been informed at Conception, a little before our departure, that a company had been formed in London for fitting out thirty privateers from twenty to thirty guns, and to be ſtationed ſo as to intercept all ſhips coming from the Indies. Though this was in fact a falſe alarm, the misfortune of meeting the two abovementioned of a force agreeing with the report, gave it to us all the appearance of truth; and we concluded that there muſt be many more cruiſing in proper ſtations near the coaſts. This opinion was very natural to us, who for above two years had received no other accounts; and after what had happened, it would have ſeemed an inexcuſable ſtep, to have expoſed ſuch a valuable cargo, as that of the Delivrance, in ſuch a heavy veſſel, as muſt unqueſtionably have fallen into the hands of the firſt enemy that ſhould give her chace. All her force conſiſted in fourteen four-pounders, and about fifteen muſkets; beſides nine of our people had been diſabled in the laſt action: and what was ſtill worſe, we had little or no powder. Another bad circumſtance was, that from the damage the ſhip had received in the action, ſhe made ſo much water, that though we began to pump immediately on the concluſion of it, it was midnight before we could free the ſhip; and every one who had received no hurt in the action, without diſtinction, voluntarily took his turn in the labour. Weighty as theſe reaſons were, that the captain and his officers might not be charged with taking ſuch an important ſtep of themſelves, a repreſentation was alſo made to the paſſengers, who all readily approving of it as the beſt reſource in our preſent exigency, the very ſame evening our courſe was altered, and we began to ſteer for Louiſburgh as a port of ſafety.

The place where the action happened, according to my reckoning, and the new French chart, was 90 leagues N. W. five degrees weſterly from the iſland of Flores.

After changing our courſe we ſteered N. W. one quarter weſterly, and W. one quarter northerly, till the 28th, when by obſervation we found ourſelves in the latitude of 46 degrees, 18 minutes, and 23 degrees, 45 minutes eaſt of Conception, the winds generally being S. S. W. and W. S. W. One day only we had them at N. W. and W. N. W. and this was on the 23d after a very violent ſtorm, which began at twelve in the night of the 22d, at E. S. E. whence at ſix in the morning the wind flew about to the S. and S. one quarter weſterly, whilſt we lay to under our mainſail; and, when the wind offered, made way under that and a topſail with a reef in both; beſides the high ſeas which ſuch a ſtorm naturally occaſioned, we had alſo fogs and rains.

FROM the 46th degree we continued ſteering W. ſometimes a little towards the S. or N. endeavouring always to keep that latitude, though ſometimes the winds obliged us to alter our courſe: for though they were generally S. S. W. and S. W. though oftner in the firſt than the ſecond; they ſometimes came about to the N. E. E. and S. E. and theſe changes were always attended with hurricanes.

ON the fifth of Auguſt we found ourſelves in the lat. of 45 deg. 14 min. and 24 deg. 16 min. E. of the meridian of Conception; the wind, which till ſix in the evening of the foregoing day had been S. now became calm; and at two in the morning, we had it at W. N. W. and N. W. from whence it veered N. about to the E. and from thence again returned back to the N. E. freſhening more than it had done before. Afterwards it began to blow in ſqualls, and again ſhifted to the N. On the ſixth, at eight in the evening, it veered to the E. and two hours after to E. S. E. where it continued till ſix in the morning of the ſeventh, when it ſettled in the S. E. and abated; though its greateſt force here had never been ſuch as to render it neceſſary for us to lay to, as had been the caſe before, and was again afterwards.

ON the 7th, being in the latitude of 45 deg. 17 min. and the wind at S. at two in the afternoon it ſuddenly flew about to the W. where its extreme violence obliged us to furl every ſail, and lie to. We had alſo here a very high ſea to encounter with, but in two hours our apprehenſions were relieved, the wind ſhifting to the N. W. and abating conſiderably; and two hours after it again returned to the N. whence at ten at night it veered to W. one quarter ſoutherly, and became ſo moderate that we could carry our topſails. Here it ſettled, and the weather became fair and eaſy; but theſe variations, by forcing us out of our true courſe, were of great detriment to us, as will be ſeen in the ſequel.

On the 10th, being in the latitude of 45 deg. 14 min. and 17 deg. 25 min. E. of Conception, with the wind at S. it began to blow, and at five in the morning we were obliged to take in all the reefs in our topſails; it then ſhifted to the S. S. W. with a prodigious ſea; ſo that at three in the afternoon we were obliged to lie to under a reefed mainſail. At ten o'clock it ſhifted to the S. W. and S. W. one quarter weſterly; when abating a little on the 11th, at ſix in the morning, we made way under our foreſail and topſails all reef'd; and the wind continued for ſome time in this rhomb.

The uſual inclination of the wind in theſe ſeas, and common to all parts of the northern hemiſphere, is to follow the ſun from E. to S. S. S. W. and N. ſomething like what has been obſerved in the chapters which treat of the South-ſea. And thus when it has blown a ſtorm, inſtead of continuing its inclination, it returns; and though with all the appearance of a calm, within a day or two it riſes again with redoubled fury. This is a difficulty not eaſily ſolved, for among the great number of perſons, otherwiſe doubtleſs reſpectable for their eminent talents, who have applied themſelves to inveſtigate the cauſes and origin of winds, not one of them has accounted for their irregularities and gradations, both with regard to their variations, impulſe, and direction.

In this paſſage to the Newfoundland ſeas, ſtorms are very frequent, yet they differ according to the ſeaſons of the year. We have already ſeen that they moſt uſually happen when the wind is at S. and though the northern winds are very ſtrong, yet they do not equal thoſe of the former quarters. On attending to this particular, a certain conformity will be found betwixt the two oppoſite hemiſpheres; as in each, beſides the circulation of the winds, the ſtorms happen when they blow from that part of the pole oppoſite to that which is neareſt each hemiſphere. In the South-ſea the ſtorms generally riſe from the N. and W. winds; and in that of the N. they are occaſioned by the S. and and W. winds.

The hard gales which are met with in ſummer in the paſſage to Newfoundland, are of no long continuance, like the two with which we were ſurprized in this voyage; but they are more ſudden and violent than in winter; for from their beginning to the very height of their violence is ſcarce half an hour; and though in this ſeaſon they are not very frequent, yet it never paſſes without ſome: but in winter they continue three or four days ſucceſſively, and with no ſmall force. Theſe of both ſeaſons are more or leſs accompanied with fogs and ſhowers.

July the 31ſt, according to my account, at eight in the morning, being in 45 deg. 57 min. latitude, and 27 deg. 3 min. E. of Conception, we found by the whitiſh tinge of the water, that we had entered on the bank; and on ſounding found 55 fathom, and the bottom, ſand mixed with ſmall ſhells. On comparing the ſounding and the bottom with the new French map, my reckoning of the courſe was ſix or ſeven leagues too forward; that is, we had that diſtance to ſail before we came to a bottom of that kind. On the evening we tack'd with an intent of leſſening our latitude, as well to keep at a diſtance from Placentia, as to avoid ſome ſhoals lying at the weſt end of the bank in the latitude of 46 deg. and on this account we again ſtood from it.

On the 2d of Auguſt, being in the latitude of 45 deg. 30 min. 30 ſec. 27 deg. 2 min. E. of Conception, we ſounded, and found 70 fathom water, and the bottom rocky. We continued our ſoundings every day, and found the bottom as ſpecified in the following table:

Days	Latitude		Long. from Merid. of Conception		Fathom of Water	Bottom	Colour of the Water
4 Aug.	45	14	24	38	40	ſmall gravel	green
5	45	12	23	50	48	brown gravel	whitiſh
6	45	8	22	56	48	ſtony	ſea blue
6	45	9	22	30	50	ditto	ditto
6	45	11	21	51	55	ſmall gravel and ſand of different colours	light blue
7	45	18	19	53	35	coarſe white ſand and ſmall gravel	dark blue
8	45	23	20	12	45	coarſe ſand of all colours and ſmall gravel	whitiſh green
8	45	26	20	7	no bottom at 80 fathom		ditto
9	45	20	19	12	ditto		light blue
10	45	16	17	14	45	ſtony	of a bluiſh green
	45	19	16	32	no bottom at 80 fathom		dark green

July the 27th, in the latitude of 45 deg. 54 min. and 32 deg. 6 min. E. of Conception, we ſaw ſome birds as it were ſporting on the water. The ſize of them was ſomething leſs than a wood-pigeon, and all over black except the tail which was white. They who are converſant in theſe voyages ſay, that they are ſeen at a great diſtance from the bank; and thus we found it, being obliged to leſſen our longitude 5 deg. to return to our firſt ſoundings. We alſo ſaw two birds of that kind called Penguins, of which there are great numbers on the bank: and tho' in the common opinion theſe birds never fly to any great diſtance from it, we found it otherwiſe. Theſe Penguins are of the bigneſs and ſhape of a gooſe, alſo with little or no tail. They fly againſt the courſe of the water; their plumage on their breaſt and belly is white, but their back, the upper part of their wings and all their neck brown. As fiſh is their whole ſubſiſtence, they dart down into the water with prodigious celerity, and continue a long time under it in purſuit of their prey.

ON the 30th, in the latitude of 45 deg. 54 min. and 28 deg. 43 min. E. of Conception, we again ſaw ſome of the ſame birds as on the 27th, beſides ſome ſmall whales near the ſhip. During the whole remainder of the voyage we had always ſight of theſe kind of birds, and another very nearly reſembling the Penguin; but the bill was black, very large, and of a ſquare form. Both kinds ſwarm on the bank, but without it they are not ſo frequent. On our approach to the bank we alſo ſaw great numbers of cavallas, which abound all along the coaſts. We likewiſe ſaw ſome ſhoals of tunny fiſh. About the edge of the bank there is always a great ſwell: but on coming within the ſoundings, even in a hard gale of wind, though attended with a high ſea, it does not continue any longer than the wind; the one ſubſiding as the other abates.

IF I have been ſo very circumſtantial in my account of the voyage from Conception, and given a detail not only of the winds and times of the year, but alſo of the agitation of the ſea, in ſtorms and hard gales, the courſe, the colour of the water, and the ſigns of birds and fiſhes, I hope it will be attributed to my zeal for the improvement of navigation, and my deſire that mariners who are ſtrangers to this voyage, might be acquainted with theſe things, which are certainly of real utility; as by thus acquiring a knowledge of the latitudes and longitudes, which are punctually ſet down at every ſign or an extraordinary occurrence, they might be acquainted with the particulars of every part; and conſequently the better enabled to take the moſt proper meaſures; and that nothing may be wanting for their information in the particulars of this laſt voyage, I ſhall poſtpone the account of our misfortune at Louiſbourg, to inſert here

A table of variations of the needle as obſerved in our paſſage, from Fernando de Norona, to Cape Breton, according to the latitudes, and longitudes from the iſland of Conception, in which the obſervations were made.

Days of the Month.	Lat. D. M.	Long. D. M.	Variations D. M.	Time of making Obſervation.
June 11	1 24 S	42 35	2 39 E	Evening.
12	0 16 N	42 50	2 43 E	Ditto.
17	7 14	43 32	0 38 W	Ditto.
19	8 17	43 21	1 40	Morning.
27	18 16	35 46	1 15	Ditto.
July 3	27 11	32 34	0 10	Ditto.
3	27 58	32 24	1 20	Evening.
4	28 47	32 17	1 20	Morning.
6	32 44	31 58	6 50	Evening.
7	33 16	31 44	6 55	Morning.
9	35 47	31 46	7 0	Evening.
12	40 10	32 58	8 5	Morning.
13	40 22	34 17	10 55	Evening.
17	41 35	36 16	11 0	Morning.
20	43 24	38 41	11 0	Evening.
25	45 7	34 29	15 50	Ditto.
29	46 7	28 10	14 30	Ditto.
30	45 59	28 16	13 10	Morning.
Aug. 5	45 12	23 41	20 15	Evening.
8	45 22	20 12	13 20	Morning.
8	45 27	19 45	13 0	Evening.
9	45 22	18 39	15 15	Morning.

On the 24th of July, in the latitude of 44 deg. 52 min. by obſervation, which was 25 min. leſs than that by account, and according to my eſtimate 36 deg. 6 min. eaſt of Conception; no obſervation had been taken ſince the 20th. But we found that the currents had in each days ſailing carried the ſhip

6 min. S. On the 25th in the latitude of 45 deg. 6 min. and 34 deg. 47 min. eaſt of the ſame meridian, we again found the latitude by obſervation to be 8 minutes leſs than that by account. But afterwards they agreed till we had paſſed the bank, when on the 12th of Auguſt, 16 degrees two minutes eaſt of Conception, our latitude by obſervation, was 45 degrees 58 minutes, an exceſs of juſt 30 minutes beyond that by the reckoning; and this great difference had commenced on the 9th, when we were in 45 deg. 22 min. latitude, and 19 deg. 1 min. eaſt of Conception.

FROM this difference it is manifeſt that, on the weſt ſide of the bank, betwixt it and Cape Breton, that is under the meridian of Placentia, the currents ſet to the northward, agreeably to the opinion of the pilots in thoſe ſeas, who all declare that the ſea ſets into the gulph of Canada by the ſtreight betwixt cape Roze, the moſt weſtern point of the iſland of Newfoundland, and the north cape in the iſle Royale; and diſcharges itſelf by the ſtreight of Beliſle, formed by the main land and the north point of Newfoundland: and we ſenſibly found on making the coaſt, that the waters carried the ſhip northward.

ON the 12th of Auguſt in the morning, we ſaw a great number of thoſe kinds of ſea-fowl which always keep near the ſhore, and particularly ſeveral gulls, from which with the courſe we had ſteered from the time of our coming into ſoundings on the 2d of Auguſt, we concluded ourſelves to be not far from land, having alſo diminiſhed our longitude exactly 11 degrees. In this conjecture we were ſoon confirmed by weeds, pieces of wood and boughs floating on the water, and at twelve o'clock we actually made the land, though at a great diſtance. At four o'clock in the afternoon we had a plain ſight of it; but being low and level we were obliged to ſhorten ſail and lie to, till the following day, when at half an hour after ſix in the morning, we ſaw the iſland of Eſcatari, which lies about five leagues north of Louiſburgh: but the wind continuing S. W. and the current ſetting the ſhip northward, we were obliged to work up towards the harbour.

On the 13th, at ſix in the morning, we ſaw a brigantine plying along the coaſt for Louiſburgh; the Delivrance on this hoiſted a French enſign, which was anſwered by the other, firing two or three guns. This gave us no manner of uneaſineſs, concluding that the brigantine ſuſpecting ſome deceit in our colours, had fired thoſe guns as a warning to the fiſhing barks without, to get into the harbour; and they put the ſame conſtruction on this firing, immediately ſhewing the greateſt hurry in making for a place of ſafety. An hour afterwards, being near eight o'clock, we ſaw coming out of Louiſburgh two men of war, which we immediately took for ſhips belonging to a French ſquadron ſtationed there for the ſecurity of that important place, and that they had come out on the ſignal from the brigantine, that a ſhip had appeared in ſight, leſt it might be ſome Boſton privateer, with a deſign on the fiſhery. Thus we were under no manner of anxiety, eſpecially as they came out with French colours, and one of them had a pennant. All the forts of Louiſburgh, as well as all the ſhips in the harbour, which we could now plainly diſtinguiſh, wore the like diſguiſe. Here I muſt refer to the reader's imagination the complacency and joy which ſwelled every heart, imagining that we now ſaw the end of all our fears and diſaſters; a place of ſafe repoſe after a voyage of danger and fatigue. Then let the reader be pleaſed to think what an edge the melancholy diſappointment gave to our aſtoniſhment and dejection, when amidſt the indulgence of ſuch pleaſing ideas, we found our hopes deſtroyed, and all our viſionary ſchemes of delight, ending in the real miſeries of captivity.

WE were now ſo near the two ſhips which were coming out of the harbour, that orders had been given for hoiſting the boat out to go with an officer on board that which ſeemed to be the commodore; and we unloaded our guns of their ſhot to ſalute them. The ſmalleſt which carried fifty guns leading the way, came along ſide of us; then indeed from what we both heard and ſaw, our fatal diſappointment became too evident, and our misfortune was immediately confirmed to us, the ſhip hoiſting its national colours, and firing into us carried away the foretopſail halliards, that the ſail dropped down, and at the ſame time the larger ſhip came up on the ſtar-board ſide of us. Betwixt two ſuch enemies no reaſonable perſon will offer to charge the captain of the Delivrance with cowardice, that without offering any reſiſtance, which would have been a wild temerity, he immediately ſtruck his colours. The boat from the ſmalleſt ſhip came aboard and took poſſeſſion of us, having as ſhe advanced been hoiſted out for that purpoſe: and thus after firing only one gun, returned into the harbour with a very rich prize.

THIS accident gave a total change to our flattering expectations; brought ruin on our fortunes; overthrew all our ideas of the uſe and improvement of them. Our joy was ſtifled in its birth; and inſtead of our anticipated repoſe, we entered on a new ſcene of troubles and diſtreſs, aggravated by the loſs of our ſubſtance and liberty, where we had promiſed ourſelves recreation and enjoyment.

THESE two Engliſh men of war were the Sunderland, captain John Brett, of ſixty guns, and the Cheſter, captain Philip Durell, of fifty: and it was to the latter that the Delivrance ſtruck. The officers, captain Durell, for their better accommodation, ſent to the houſe which had been aſſigned him, when, purſuant to the articles of capitulation at the taking of Louiſburgh, the inhabitants were ſent back to France.

This houſe he made but little uſe of, living continually aboard the ſhip.

As to my papers, on our departure from Fernando de Norona, I had made a packet of all the plans and relations which might have been of ſervice to the enemy; alſo the Vice-roy's letters and other papers committed to my care, that on an exigency they might be ready to be ſunk. I had alſo deſired of the captain, the ſupercargo and other officers, that in caſe it was my fate ſuddenly to fall in the action, they would do me that kind office. Accordingly when I ſaw that there was no poſſibility either of oppoſing or getting clear of the enemy, I threw them into the water, with ſome bullets faſtened to them, to diſappoint the alertneſs of the enemy, who otherwiſe would unqueſtionably have been for laying hold of them: but my papers relating to the menſuration of the degrees of the meridian, together with the phyſical and aſtronomical obſervations and hiſtorical narratives, I kept by me, the contents being of univerſal concern, and no detriment could reſult from the enemy's knowledge of them: but as among men who ſeemed to mind nothing but what was ſilver or gold, they would have ran a great riſk of being abuſed or confounded among a multitude of others, I thought proper to acquaint the captains on what ſervice I had been, and as thoſe papers tended to the improvement of navigation, took the liberty of recommending them to their favour: upon which, after having looked on them with ſome attention, they laid them aſide, and carried them afterwards to the commander of the ſquadron, with whom they remained, till, together with myſelf, they were ſent to England.

CHAP. VI.

Don GEORGE JUAN's *Voyage from* LA CONCEPTION *to* GUARICO *in the Iſland of* SAN DOMINGO; *and from thence to* BREST *in* FRANCE, *together with his return to* MADRID.

THE frigate la Lys, having on the fifth of February, parted company from the three others, on account of her making ſix inches water every hour, which would naturally increaſe by the working of the ſhip, ſteered directly for Valparaiſo, where making all poſſible diſpatch in careening and watering, on the firſt of March ſhe was ready to put to ſea. The winds, as is uſual at that ſeaſon, being at S. and S. W. the Lys was obliged to ſtand to the northward of the iſland of Juan Fernandes; and drive till ſhe was in the latitude of 32 deg. 18 min. where ſhe fell in with a wind at S. E. which carried her to the latitude of 35 deg. and 11 min. weſt of the meridian of Valparaiſo; here it ſhifted to the S. W. and thence along the N. W. quarter to the N. in which time the Lys only got into the latitude of 36° 30′ being the 17th day of the month. Here the wind veered to the S. and S. W. blowing very hard, which cauſed ſuch a ſea that they were obliged to lie to under their mainſail. On the 18th, though the violence of the wind abated, it continued in the ſame point; afterwards it changed to the W. and N. W. where it continued till the ſhip came into 40° 30′ latitude, ſtill keeping the ſame longitude of 11°. Here ſhe met with a ſecond hard gale at ſouth, which they weathered in the ſame manner, till it abated, ſhifting immediately to the S. W. weſt, and N. W.

On the 25th, in the latitude of 46 degrees, they met with a ſtorm at W. which obliged them to lie to under a reefed mainſail. After its greateſt violence was ſpent, till the fourth of April, when they found themſelves in 58° latitude and 1 eaſt longitude from Valparaiſo, the firſt meridian for the courſe of the voyage, the wind ſhifted from S. to S. W. W. and N. varying alſo in its force; and the ſhip carrying ſail accordingly.

On the tenth, in the latitude of 55 and 18° eaſt of Valparaiſo, they were ſurprized with a hard gale of wind at S. and S. E. which obliged them to run under their courſes. The force of the wind indeed was not ſo great as in the two gales beforementioned; but was much more troubleſome, being attended with very thick ſnow, and the cold intenſe. The wind abating ſhifted to the S. W. W. and N. W. whilſt the ſhip paſſing eaſt of Staten land, on the 26th was in the lat. of 34° and long. 32 and 30′. Here they fell in with winds at E. and S. E. which indeed are the briſas or general winds.

The ſlow progreſs of the voyage, and the heavineſs of the frigate, which even in the moſt favourable weather, never went above ſeven miles an hour, gave room to apprehend, that it would be impoſſible to reach the coaſt of Spain, without putting in to ſome harbour for a freſh ſupply of proviſions; the captain therefore repreſented to the ſupercargo, that no place could be more proper for ſuch a purpoſe than Monte-Video, being a Spaniſh port; and that if they paſſed it, they ſhould be obliged to make uſe of one belonging to ſome foreign power. But he, conformably to the preciſe order of the regiſter againſt putting into any harbour, unleſs on the coaſt of Spain, could not be prevailed upon to comply with the captain's propoſal: and accordingly the courſe was purſued without alteration.

THE winds continued at S. E. E. ſometimes at S. and S. W. with heavy rains, thunder and lightning, till the frigate came into 23° of latitude, and 39 of longitude.

ON the 12th of May, at one in the morning, they diſcovered a ſmall frigate to leeward; and on the 19th being in 10° 30′ S. latitude and 39 E. longitude, ſaw three large ſhips: but both ſides continued their reſpective courſe, without making any motion to avoid or approach each other.

ON the 27th they croſſed the line, 44° eaſt of Valparaiſo, or 30° 30′ W. of Paris. As theſe parts abound in ſharks, they caught ſeveral, and one of them, after open it and taking out its intrails, heart and lungs, they threw it again into the water; and it being calm they ſaw it ſwim near the frigate above a quarter of an hour, till floating out of ſight they could not ſee the death of the creature. The heart alſo of this and many others on which the ſame experiment was tried, was obſerved to have a motion on board the ſhip for above a quarter of an hour.

ON the firſt of June the frigate was in 4° 30′ N. lat. the wind N. E. and S. E. and ſometimes at S. and S. W. with heavy rains; but now the proviſions, and particularly water growing ſhort, the captain, with the approbation of his officers and paſſengers, determined to put in at Martinico, and accordingly the courſe was directed thither.

ON the 11th in the morning, being in the latitude of 9 deg. 30 min. and 39 deg. eaſt of Valparaiſo, they had ſight of three large ſhips which continued their courſe without ſtanding for the frigate; and as their courſes were directly oppoſite, they ſoon loſt ſight of each other.

ON the 21ſt at night, they had a ſhort ſquall rather of rain than wind, but the night being dark, they ſaw at the top-gallant-maſt head, the meteor called by the ſailors San Telmo, which laſted ſix hours. Some imagine this meteor to be a ſign of fair weather; but this opinion is as little to be relied on as many others adopted without reflection, and juſtly called vulgar errors: it is only a natural phænomenon, more particularly ſeen in nitrous and damp places of the earth, in church-yards and the like, and on the ſea it proceeds from the ſame cauſe; and though it moſt commonly makes its appearance in ſtormy weather, the agitation of the waves ſending forth a greater quantity of nitrous particles, and being more copiouſly carried up to a greater height, by the force of the winds, the luminous matter ſettles at the extremity of the maſts or yards by a ſmall part of it, whilſt the remainder has the appearance of a flame in the air: yet it is not very uncommon to ſee this meteor in fair eaſy weather: and this was the caſe here, it being quite calm; and in the Delivrance on the ninth of Auguſt, at half an hour after one in the morning, and in 28° 40′ S. lat. we ſaw one of theſe kinds of lights, and on the ſame part of the maſt; but ours only laſted an hour, the wind at that time was but faint; and this alſo had been preceeded by hard violent ſhowers attended with ſome wind; and the atmoſphere every where covered with a thick cloud. In both inſtances no tempeſt happened before or ſoon after; conſequently they concurred to confute and explode the falſe notions of ſailors, who are poſſeſſed with a belief of certain conſequences being preſaged by theſe lights, according to their ſituation, the part of the ſea and the time; and may likewiſe undeceive thoſe, who too eaſily ſwimming with the ſtream of vulgar opinions, are fond of turning the fortuitous effects and products of nature into ominous myſteries.

On the 15th, in the long. of 13° 30′ they ſaw great numbers of birds, which in their opinion indicated that land was not far off, and accordingly lay to all that night, and the following: but fearing that ſome Engliſh privateers might be cruizing to windward of Martinico, in order to avoid them the Lys ſteered for the iſland of Tobago, intending to go directly from thence to Martinico. On the 28th the colour of the water became totally changed, ſo as to reſemble that of a turbid river; which they attributed to the iſſue of the Oronoco, though the mouth of that river is betwixt ſixty and ſeventy leagues diſtant; lying to in the night they ſounded and found ſixty fathom water, and a muddy bottom.

On the 29th, at half an hour after ſeven in the morning, they made the iſland of Tobago lying weſtward: and at noon ſaw the little iſland of San Gil, diſtant about two leagues from the N. E. from the former: it bore S. three leagues and a half or four leagues off; and the latitude obſerved at the ſame hour, was 11° 36′. According to the obſervations of longitude taken at Valparaiſo and Martinico, deducting from them that of the iſland of Tobago, the error in Don George Juan's eſtimate was only thirty-five leagues; which may rather be termed an inaccuracy, being abundantly ſufficient for, or at leaſt, it was of a ſufficient juſtneſs in a voyage of ſuch a length; and from it I conclude that they met with no currents about Cape Horn; though not above a month before, when the Delivrance ſailed round the Cape, we found them very ſtrong; and conſequently they muſt ſoon after ceaſe. The ſame change was obſervable in the weather, and this partly occaſioned that of the currents, for though the wind was at S. E. during that part of our voyage, yet it was not conſtantly there, nor had we any of thoſe hard gales which the Lys met with: an evident proof that thoſe winds already prevailed there; and thus checked the courſe of the waters, keeping them in their eaſtern ſituation.

From the iſland of Tobago, they continued their courſe to Martinico, and in order to this ſteered all the night of the 20th betwixt the iſland of Barbadoes and St. Vincent. On the 30th, when they imagined themſelves betwixt thoſe iſlands, having ſteered N. one quarter northerly, they had no ſight of any land. On the firſt of July they were in 14° 30′ lat. and by eſtimate a degree weſt of Tobago: and thus the frigate ſhould have been not far from the iſland and to windward of Martinico; but they ſtill were out of ſight of all land. So great a difference in the ſhort time of two days ſail was conjectured to proceed from currents; but the greateſt perplexity was to determine whether they ſet to the eaſt or weſt. This doubt, however, was removed by conſidering that it was impoſſible they could have paſſed through the knot of iſlands, from Granada to Martinico, without ſeeing at leaſt one of them, even if it had been in the night time, as beſides their magnitude, the great concern they were under of meeting the enemy, cauſed them to keep a very careful look out. It was therefore concluded that the frigate could not be to the weſt of Martinico, but that the currents had drove her to the eaſtward. Accordingly they ſteered S. W. one quarter weſterly, in order to fall in with it; and after ſailing thus thirty leagues without making any land, other reflections aroſe, though ſtill with ſome apprehenſion that they were to the weſt of Martinico; and now the courſe was altered to north, without knowing the place where the ſhip actually was, in order to avoid the danger, that if ſhe was on the weſt ſide, by ſteering as the day before ſhe would fall to leeward of the harbours of Puerto-Rico or St. Domingo; and thus find it extreamly difficult to reach any port. The wind was at E. N. E. and keeping as cloſe to it as poſſible, on the fourth at half an hour after three in the afternoon, they made the middle part of the iſland of Puerto-Rico. This was a tranſporting ſight to all, as having before their eyes a ſecure and plentiful port: and having happily eſcaped the dangers of the Granadillas, a knot of iſlands where the greateſt channel is but three or four leagues broad, the currents having very providentially carried the ſhip through the midſt of them, clear of the rocks, which on both ſides have proved fatal to many veſſels: and they had not ſo much as any ſight of land. By Don George Juan's eſtimate he found that they might when they ſteered betwixt the iſlands of Barbadoes and St. Vincent, the currents had carried them almoſt forty-two leagues to the weſt: and though they all very well knew that the courſe of the waters in that part of the neighbourhood of Martinico ſets weſtward, they were at a loſs to conceive how they had paſſed betwixt thoſe iſlands without having ſight of any one, they lying ſo near one another, the night being clear, and every one keeping a good look out.

ON the night of the fourth day, they ſometimes lay to, and ſometimes made an eaſy ſail, in order to get into the channel betwixt the iſlands of Puerto-Rico and St. Domingo, intending for Guarico, otherwiſe called cape Francois. On the 5th at ſix in the morning, the S. W. point of the iſland of Puerto-Rico bore N. at about four leagues diſtance: and ſtanding towards it till within the diſtance of only two leagues, they could very plainly ſee the bottom, which was ſtony; and on ſounding found ſeven fathom water. On this they tacked to the weſt, and continuing in this direction about two hours, they had always the ſame depth of ſeven fathom, but coming into twenty they returned to their former courſe.

AT eleven in the forenoon they diſcovered to leeward two large ſhips: and apprehending they might belong to the enemy, the frigate tacked: on which they alſo did the ſame, and crowded ſail. At noon the latitude by obſervation, was 8° 7′, and the iſland of Deſecheo bore N. one quarter weſterly, diſtant five leagues. The two privateers, for ſuch it is believed they were, lay becalmed; and this enabled the Lys to keep at the ſame diſtance as when ſhe firſt diſcovered them; and the wind freſhening to the N. about ſun-ſet, ſhe ſtood E. N. E. in order to get cloſe to the ſhore, and thus avoid the two ſuppoſed privateers; determined however to make a ſtout reſiſtance, if they ſhould be obliged to come to that extremity. Afterwards the wind ſhifted to E. N. E. and the privateers continuing S. W. the Lys ſteered northward and weathered the iſland of Deſecheo about two leagues. The wind afterwards freſhened, and at eleven at night the Lys ſpread all the canvas poſſible, ſteering N. W. and by the 6th in the morning, had neither ſight of the land nor the privateers.

On the 7th at ſix in the morning they made old cape Francois five leagues diſtance; they kept in with the coaſt, and at noon by obſervation found the latitude 19° 55′ from which they concluded that of the cape to be about 19° 40′, and though the land which projects into the ſea be low, the inland parts appear very mountainous.

On the 8th at ſix in the morning, cape la Grange bore S. diſtant five leagues; and by noon the frigate being within three leagues of cape Francois harbour, lay to with a ſignal for a pilot, who being come aboard, carried the Lys into the harbour, where ſhe anchored at two in the afternoon, in eight fathom water and a muddy bottom; about a quarter of a league diſtant from the town.

Variations of the needle obſerved during the whole courſe of the voyage, the longitude being taken from the Meridian of Valparaiſo.

Latitude.		Longitude.		Variations.	
D.	M.	D.	M.	D.	M.
48	45 South	10	30 Weſt	14	30 E.
57	15	9	30 Eaſt	24	30
49	30	23	30	19	0
40	0	27	30	14	0
38	15	29	0	12	30
37	15	30	0	12	0
36	15	30	45	11	0
35	0	31	40	10	30
33	25	33	30	9	0
27	0	36	15	4	0
22	15	38	45	2	0
15	30	37	0	1	30
7	30	41	0	0	0
1	15	43	15	2	15 W.
0	0	44	0	3	30
9	30 N.	38	30	1	30
11	15	28	0	1	0
11	15	14	0	4	0 E.
In cape Francois or Guarico				5	15

THE frigate arrived at the harbour of Guarico in the moſt favourable time, five men of war being then at Leogan, another harbour in that iſland belonging to the French, and expected there in order to convoy a fleet of merchantmen to Europe.

GUARICO lies on the N. W. ſide of the iſland of Saint Domingo in 19 deg. 45 min. 48 ſec. N. latitude, and 73 deg. 0 min. 45 ſec. weſt of the meridian of Paris, according to the obſervation of Don George Juan taken on the ſpot: the town is about one third of a league in length, and contains between thirteen and fifteen hundred inhabitants, who are a mixture of Europeans, white creols, negroes, mulattoes and caſts; but the laſt the moſt numerous. It is but a few years ſince that all the houſes in the town were of wood; but the greateſt part of them having been conſumed by the unextinguiſhable rapidity of a fire, the greateſt part of them have ſince been built of ſtone. They all have only a ground floor, except here and there one with a ſtory. Beſides the pariſh church, which adds an ornament to the ſquare where it ſtands, here is a college of Jeſuits, who have the care of the ſpiritual concerns of the inhabitants, and diſcharge it with exemplary affection and ſedulity. Indeed at the firſt ſettlement of the French here, the prieſts were capuchins; but the latter being either unable to bear the climate, or not bleſſed with a ſufficient ſtock of patience to reconcile themſelves to it, forſook the churches, on which the Jeſuits took charge of them. Here is alſo a nunnery of Urſelines recently founded, and a convent of religious of San Juan de Dios. About three quarters of a league from the town is an hoſpital, remarkably ſpacious and beautiful, and which receives all patients who apply for admittance. The pariſh church, though a handſome building, has not yet recovered the damages it ſuſtained at the fire. The college of Jeſuits is a moſt elegant ſtructure in every reſpect; and though not large, is ſufficient for the conveniency of the fathers generally reſiding in it, which never exceed ſix. The nunnery is of greater extent; but by the king's order that the increaſe of the town may not be obſtructed, no young women natives of the country are allowed to take the veil, ſo that it can only be conſidered as a place of genteel and regular education, till they are of age to enter on another ſtate.

The town lies open without any other defence than a ſingle rampart, two batteries on the ſea-ſide, and a little fort on the point of Puolet for defending the entrance of the harbour, at about two thirds of a league from the town. The regular garriſon both for it and the place itſelf conſiſts partly of French and partly Switzers, beſides a numerous and complete body of militia formed of all the inhabitants capable of bearing arms, who are diſciplined, and on the ſame footing as the regulars; jointly with whom, the better to fit them for ſervice on any emergency, they mount guard and perform all other military duties. No country can be better cultivated than the neighbourhood of cape Francois. There is not a ſpot of ground capable of bearing any thing, but is ſown with the moſt proper ſpecies of grain. And by theſe farms or habitations, as they are generally called, where the ſervile work is all done by negroes, the people ſubſiſt in comfort and even in affluence; being enabled to ſend vaſt returns to France for the European commodities brought hither. The grounds belonging to theſe habitations are laid out in plantations of ſugar, indigo, tobacco, and coffee, the joint produce of which is ſo large that 30,000 tons are annually exported to France; and this vaſt quantity only from the territories of cape Francois; that it may be conceived how immenſe the produce would be, were all the country which the French poſſeſs in this iſland cultivated. The contraſt of this with the little advantage drawn from the remaining part of it, which though even more fertile, cannot maintain itſelf, a ſupply being every year ſent for the ſubſiſtence of the garriſon and eccleſiaſticks, ſtrongly ſhews the advantages accruing to a country from ſkill and induſtry.

THE large fleet of ſhips which frequent the ports of this colony, are ſo plentifully ſupplied with European products and manufactures, that at all times, and eſpecially in time of peace, they enjoy a plenty of every thing; excellent bread made of wheat brought from France, wines, diſtilled liquors and fruits of all kinds. The only article of proviſions the inhabitants are obliged to procure from the Spaniards is meat, in return for which they ſupply them with linen, and other European goods. This commerce is indeed prohibited: but the want being reciprocal, it is carried on with as little ſecreſy and diſguiſe, as if it had the ſanction of the laws. For as no regiſter ſhip goes from Spain to St. Domingo, the iſland, for want of a due culture of the lands, being incapable of making any returns, the colony muſt neceſſarily periſh, unleſs ſupplied with goods from the neighbouring plantations.

There cannot be a more convincing proof of the vaſt commerce carried on by France through the channel of this colony, than the number of ſhips which come annually to its different ports: no leſs than one hundred and ſixty ſmall and great, that is, from one hundred and fifty to four or five hundred tons, come to Guarico; and this may ſerve to give ſome idea of thoſe deſtined to Leogane and Petit Guave, and others of leſs note: all theſe ſhips come loaded with goods and proviſions, and every one returns with at leaſt 30 or 40,000 dollars, in ſilver or gold. Thoſe only which go from Guarico, excluſive of the cargo which conſiſts of the products of the colony, carry to France every year half a million of dollars; and the ſame computation, which is not in the leaſt improbable, being made for each of the other two chief ports, and as much for all the other ſmaller ports, the total will be two millions of dollars per annum: and this was preciſely the ſum carried in the fleet which the Lys had the good fortune to join with in her return.

It is eaſily conceived that not one fourth part of the cargo of ſo many ſhips can be conſumed in this colony and its dependencies; and conſequently it muſt find a vent among the Spaniſh ſettlements, as the Havanna, Caraca's, Santa Martha, Carthagena, Terra Firma, Nicaragua and Honduras. Accordingly Spaniſh barks put into the little bays and creeks near Guarico, and carry on this clandeſtine commerce, when by regiſter they are authorized to go to the ports permitted.

THE climate of Guarico is extreamly hot, which equally proceeds from the country being every where mountainous, and from its proximity to the line; ſo that perſons who come there only occaſionally, on the leaſt exceſs in diet or other circumſtances, ſeldom eſcape being attacked by diſtempers, which in three or four days carry them off; particularly great numbers of the ſhips crews are ſwept away after extreme pains, the continual labour theſe unhappy people are obliged to go through in unloading and loading, taking in water and other neceſſary ſervices of the ſhip, expoſing them to all the violence of ſuch diſtempers. The malignant fevers and dyſenteries are of the ſame kind as thoſe ſo fatal at Porto-bello: and a ſufficient account being given of the temperature, the inconveniences accompanying it, and of the products of countries ſimilar to this, I may here be excuſed from dwelling any farther on thoſe ſubjects.

THE cuſtoms, genius and manners of the people here are no leſs different from the European French, than thoſe of the Spaniſh Creoles in this part of America are from the real Spaniards. Here are ſome perſons of very great fortune, and all acquired from the cultivation and improvement of their lands: and all live in eaſe and happineſs, labouring under very few inconveniences either natural or political; and this is not the leaſt cauſe of its daily increaſe: beſides, the people ſettled here are of themſelves laborious, frugal, inventive, and continually exerting themſelves in making new improvements; a turn of mind pregnant with ſo many advantages, that I wiſh it could raiſe a ſuitable imitation in the Spaniards, that by labour and induſtry they might attain that proſperity, they ſee their neighbours the French have done.

THE harbour, though open to the eaſt and north winds, is very ſecure, being partly incloſed by a ridge of rocks which fence it againſt the impetuoſity of the ſea. The chief inconveniency is, that when the breeze blows ſtrong, it is extreamly difficult and dangerous for boats to land; for thoſe winds, eſpecially at E.N.E. ſweep along the whole harbour.

At the end of the month of Auguſt, the French ſquadron under Mr. Deſturbier de l'Etanduere, which had been expected from Leogane, came into the harbour of Cape François; it conſiſted of the following five ſhips:

Le Juſte, the commodore of	70 guns
L'Alcide	70
L'Ardent	60
Le Caribou	50
La Muitne	26

Several merchant ſhips bound for Europe, took the advantage of ſailing with this convoy; and on the 6th of September, the whole fleet put to ſea to the number of fifty three ſail, including the men of war, frigates, brigantines, and bilanders. At ſun-ſet Picolet-point bore S. 5° W. diſtance four leagues and a half. The 7th they ſteered for Caycos, and not getting ſight of theſe iſlands during the day, it was thought adviſeable to lay to all night: but on the 8th at eight in the morning they ſaw the Cayco-grande, an iſland of ſand three leagues in length, N. and S. but appears the more conſpicuous from a few buſhes growing on it. At noon its ſouth point bore S. E. $\frac{1}{4}$ ſoutherly diſtant two leagues and a half. By the latitude they obſerved, that of the iſland was ſet down at 21° 35′ and by the courſe its longitude determined to be the ſame with that of Cape François, unleſs the current of the waters, which was perceived to ſet to the northward, may be ſuppoſed to have occaſioned ſome ſmall error.

The frequent danger which the merchant ſhips were in of running foul of each other, and the retardment occaſioned by ſuch confuſion, had induced them to divide themſelves, ſome going to windward and others to leeward of the men of war. But this was a conveniency which they were not long permitted to enjoy, a privateer of the enemy appearing in ſight to windward of the fleet: and on this the commodore ordered his ſquadron to form into a line; and the merchant ſhips to run to leeward of him, and keep at a proper diſtance. The currents towards the north continued with greater force on the 10th, 11th, and 12th; and during theſe days, the winds ſhifted from E. S. E. to N.

ON the 13th, the fleet coming into lat. 27° 30′, the force of the currents, which had hitherto been obſerved, now entirely decreaſed; the privateer did not fail to come in ſight of the fleet every morning; and towards night of drawing nearer, with a view of carrying off a prize: but in the day time ſhe kept out of ſight. On the 15th in the morning ſhe was ſeen ſo near, that the commodore made a ſignal for two ſhips to chace. But being a ſhip very fit for the ſervice ſhe was employed in, the men of war ſoon loſt ſight of her. The winds continued at E. and S. E. but no more currents were perceivable.

ON the 17th, in 31° of lat. and 3° 14′ E. of the meridian of Cape Francois, the wind ſhifted to N. and N. N. E. with freſh gales and ſhowers; the fleet ſtood to the eaſt; but the ſea running high, they drove to 28° 44′ lat. as was obſerved on the 23d, and 8° 40′ long. Here the winds came about to the N. W. and they began to ſteer N. E. one quarter northerly.

ON the 25th, the wind veered to the S. E. and S. with fair weather; and freſhning veered to the S. S. W. S. W. and W. the courſe of the fleet was N. E. one quarter E. and E. N. E. till the 27th of October, when they made Cape Prior on the coaſt of Gallicia;

and at five in the evening Cape Ortegal, bearing S. S. E. diſtance ſeven leagues.

Don George Juan, by his reckoning, concluded the difference of longitude between Cape Francois and Cape Prior to be 59° 30′ which is however conſiderably different from the real longitude: but this I attribute to the ſtrong tendency of the currents eaſtward at the mouth of the Caycos channel.

When the weather permitted, he continued the obſervations of the variation of the needle; and taking his meridian from the point of departure, which was Cape Francois, they proved as follows:

N. Latitude.	Longitude from Cape Francois.	Variations.
D. M.	D. M.	D. M.
30 00	2 00	1 30 E.
29 00	6 40	1 00
29 00	9 15	0 00
33 00	11 40	1 30 W.
36 22	18 30	7 00
40 00	26 00	11 00

On making Cape Ortegal, the courſe was altered to N.N.E. and on the 31ſt, at ſeven in the morning, the ſquadron had again ſight of land, which proved that of Breſt-bay; and at three in the afternoon, the whole fleet came to an anchor in that harbour.

Don George Juan being thus landed in France, embraced with pleaſure this opportunity of paying his reſpects to ſo illuſtrious a body as the royal academy of ſciences; at the ſame time communicating ſeveral particulars relating to our operations in Peru; together with ſome obſervations concerning the aberration of light, and its effect on the fixed ſtars, according to his own accurate obſervations in the province of Quito. And that celebrated body were pleaſed to expreſs their eſteem of his application and knowledge, by admitting him a correſponding member. Having thus honourably terminated all his buſineſs at Paris, he ſet out for Madrid, in order to lay before the miniſtry the event and ſucceſs of his commiſſion; and at the ſame time ſolicited that a report of it might be made to his majeſty.

CHAP. VII.

Account of the harbour and town of LOUISBOURG; *and the taking of it by the* ENGLISH; *together with ſome particulars relating to the* French *fiſhery, and the trade carried on there.*

LOUISBOURG is in the latitude of 45° 50′ N. lat. and 61° W. of the meridian of Paris. It ſtands in the S. E. part of l'Iſle Royale, and E. of Cape Breton. The town is of a middling ſize, the houſes of wood on a foundation of ſtone to the height of two yards or two yards and a half from the ground. In ſome houſes the whole ground floor is of ſtone, and the ſtories of wood. It is walled, and extreamly well fortified with all the modern works: it is only in one place about 100 toiſes in length, where the wall is diſcontinued, as indeed unneceſſary, this being filled up by the ſea, and ſufficiently defended by a palliſade. Here the water forms a kind of a large lake; but where the ſmalleſt barks cannot come, and the large ſhips muſt keep at a conſiderable diſtance, by reaſon of rocks and ſhoals; beſides there are two collateral baſtions, which flank this paſſage to a very great advantage. Within the fort, and in the center of one of its chief baſtions, is a ſtrong building with a moat on the ſide towards the town; and this is called the citadel, though it has neither artillery, nor is of a ſtruca ſtructure for receiving any; the entrance to it is indeed over a draw-bridge, on one ſide of which is a corps de garde, and advanced centinels on the other. Within this building is the apartment for the governor, the barracks for the garriſon, an arſenal, and under the platform of the redoubt, a magazine, always well furniſhed with military ſtores. The pariſh church, or rather chapel, which ſerved as ſuch, alſo ſtood within this citadel, and without it was another belonging to the hoſpital of St. Jean de Dieu, which is an elegant and ſpacious ſtructure all of ſtone, though founded long ſince.

The harbour is large and ſafe; but the entrance very narrow, being confined by an iſland called Goat iſland, on which ſtands a pretty large fort; and on the oppoſite ſide is a very high tower which ſerves as a light houſe. The coaſt on this ſide within forms a point, which advances towards the ſhore till it faces the mouth of the harbour. Here alſo is a large fortification called the royal battery, being that which defends the entrance of the harbour, and the fort on that ſide. From this fort the coaſt winds inward, and forms a large bay, which ſerves as an excellent careening place for veſſels of any burden, having a good depth of water, and being in a great meaſure land-locked: and as ſuch the country veſſels lay up here in winter. In ſummer they all come to an anchor before the town at about a quarter of a league diſtance, though the ſmaller veſſels may come within a cable's length of the ſhore, where they lie quiet from all winds except the eaſt, which blows right into the harbour's mouth, and cauſes ſome agitation; but without any danger to the ſhips at anchor in it.

Betwixt the royal battery point and that of the lighthouſe, but nearer to the former, lies a ſand always above water; but every where elſe the harbour is clear, ſo that ſhips may tack with the greateſt ſafety in going out or coming in when the wind is not fair. In winter, however, this harbour is totally impracticable, being entirely frozen ſo as to be walked over; that ſeaſon begins here at the end of November, and laſts till May or June; ſometimes the froſts ſets in ſooner, and are more intenſe, as in the year 1745; when, by the middle of October, a great part of the harbour was already frozen.

THE inhabitants of Louiſbourg, which at that time was the only town in the iſland, conſiſted of French families, ſome Europeans and others Creoles, of the place itſelf, and from Placentia in the iſland of Newfoundland, from whence they removed hither on the ceding of that iſland to the crown of Great-Britain. Their principal if not only trade is the cod-fiſhery, from which alſo large profits accrued to them, not only on account of the abundance of this fiſh, but that the neighbouring ſea affords the beſt of any about Newfoundland. The wealth of the inhabitants conſiſted in their ſtorehouſes, ſome of which were within the fort, and others ſcattered along the ſhore, and in their number of fiſhing barks; and of theſe more than one inhabitant maintained forty or fifty, which daily went on this fiſhery, carrying three or four men each, who received a ſettled ſalary, but were at the ſame time obliged to deliver a certain number of ſtandard fiſh; ſo that the cod ſtorehouſes never failed of being filled againſt the time the ſhips reſorted hither from moſt of the ports of France, laden with proviſions and other goods, with which the inhabitants provided themſelves in exchange for this fiſh; or conſigned it to be ſold in France on their own account; likewiſe veſſels from the French colonies of St. Domingo and Martinico, brought ſugar, tobacco, coffee, rum, &c. and returned loaded with cod; and any ſurplus, after Louiſbourg was ſupplied found a vent in Canada, where the return was made in beaver ſkins and other kinds of fine furs. Thus Louiſbourg, with no other fund than the fiſhery,

carried

carried on a continual and large commerce both with Europe and America. Louiſbourg was not, however, the only port where the French veſſels loaded with cod, greater numbers going themſelves to fiſh at Newfoundland, off the coaſt of Petit Norde, and on the bank, as will be more particularly ſeen in the ſequel. Beſides the inhabitants of Louiſbourg, great numbers of French were ſettled along the coaſt of the neighbouring iſlands, particularly that of St. John, where beſides their dwellings they had ſtorehouſes and all the appurtenances of a fiſhery; which being the moſt profitable occupation, and the gain leſs uncertain, very few applied themſelves to the cultivation of the country: indeed, its being in winter covered with ſnow, ſometimes to the depth of three or four feet, and even not diſſolved till ſummer was pretty far advanced, huſbandry ſeemed to want a requiſite time for the products to attain their proper maturity. Nor could any conſiderable graziery be followed here, being obliged for the ſupport of the few cattle they had, to lay up a winter's ſtock of hay, and to keep them houſed all that ſeaſon, till the ſummer's heat had removed the ſnow from the paſtures, the richneſs of which, in a great meaſure, compenſated for this dreary ſeaſon; and the quick growth of the corn and other products for the length and ſeverity of the winter.

In this and the adjacent iſlands were a conſiderable number of inhabitants, born in the country, or on the main land: and what is remarkable, theſe Indians not only reſemble thoſe of Peru in complexion and aſpect; there is alſo a conſiderable affinity in their manners and cuſtoms; the only viſible difference is in ſtature, and this advantage lies viſibly on the ſide of the inhabitants of theſe northern climates.

These natives, whom the French term ſavages, were not abſolutely ſubjects of the king of France, nor entirely independent of him. They acknowledged him lord of the country, but without any alteration in their way of living; or ſubmitting themſelves to his laws; and ſo far were they from paying any tribute, that they received annually from France a quantity of apparel, gunpowder, and muſkets, brandy, and ſeveral kinds of tools, in order to keep them quiet and attached to the French intereſt: and this has alſo been the politic practice of that crown with regard to the ſavages of Canada. For the ſame end prieſts were ſent among them to inſtruct them in the chriſtian religion, and performing divine ſervice and all the other offices of the church, as baptiſm, burial, &c. And as the end to be anſwered was of the higheſt importance to the French commerce, the perſons choſen for theſe religious expeditions were men of parts, elocution, graceful carriage, and irreproachable lives: and accordingly they behaved with that prudence, condeſcention, and gentleneſs towards the Indians under their care, that beſides the univerſal veneration paid to their perſons, their converts looked upon them as their fathers; and, with all the tenderneſs of filial affection, ſhared with them what they caught in hunting, and the produce of their fields.

L'Iſle Royale had only one of theſe miſſionaries who was the Abbe Mallard; one aſſiduous perſon being ſufficient for the few Indians which inhabit this and the adjacent iſlands.

THESE Indians, like thoſe of Canada, live in migrating companies; and though chriſtians, and already formed into villages, ſtay but a ſmall time in one place: accordingly they run up their dwellings very ſlightly, knowing that they ſoon ſhall leave them. Their firſt buſineſs in a new place where they intend to ſettle ſome time, is to build a chapel and a dwelling for the prieſt; afterwards every one builds himſelf a hut, and here they remain two, three, four, ſix months, or more, according to the plenty of game in the neighbourhood; for this being their only ſubſiſtence, whenever it begins to grow ſcarce, they remove, and the affectionate prieſt follows them wherever they go. Many of them come voluntarily to the French ſettlements, hiring themſelves for huſbandry or any other laborious work, and at the expiration of the time agreed on, return to their countrymen. Others repair to the French ſettlements in order to diſpoſe of the ſkins of the beaſts they have killed, and furniſh themſelves with the neceſſaries they want. Thus the French live in an entire ſociality and repoſe with them, little apprehenſive of any inſurrection, or their inclination to any other government, as their own takes care to recommend itſelf to them by the moſt ingratiating meaſures; and the Indians as little harbour any ſuſpicions of a deſign in the French to erect a tyranny over them, or of making any infringements on that liberty of which they are ſo fond, or on that indolence to which they are ſo remarkably addicted, that want alone can rouſe them to action.

When the ſavages have built their huts, their firſt buſineſs is to ſcour the country, and thus they continue hunting three or four days ſucceſſively, or till they judge they have a ſufficiency to ſerve them ſome time; when they return to their huts, where they never fail of carrying to the prieſt the full amount of his quota. The ſkins of quadrupeds they reſerve for ſale, having firſt made the due offering to the prieſt, who, on the produce of them, ſupplies his own neceſſities, and likewiſe furniſhes the chapel; but its ornaments, like the veſtments of the prieſt, are neither remarkable for their number or ſplendor; their ambulatory life, among other circumſtances, ſcarce admitting of either.

Besides Louiſbourg, the only fortified harbour of this iſland, it has other places of good anchorage, on the eaſtern coaſt, which terminates at Cape Norde; and on that running ſouthward from E. to W. Of theſe, the beſt for ſecurity and largeneſs are St. Anne's bay, with a narrow entrance like that of Louiſbourg, and Cabaru bay: but theſe are all uninhabited, the French having confined their views to the fortifying of Louiſbourg; as by means of it they hoped to maintain themſelves in the poſſeſſion of the whole iſland; which being ſo very woody, that on whatever part the enemy ſhould make a deſcent, there was no acceſs to it by land; and experience has demonſtrated that they thought very juſtly, it being impoſſible, without taking the fort, to become maſters of the iſland; nor had this fort ever been taken, if ſuccoured in due time; or if, from the opinion of its being impregnable, proper precautions had not been omitted.

MOST of the trees, of which the thick foreſts of this iſland conſiſt, are pines, though not of the ſame nature with thoſe of Europe. They are of two kinds: one very fit for boards and ſuch like uſes; the other, being ſhort and knotty, is uſed for fuel or making ſhort rafters; and this is called pruche. A decoction of the ſprigs, being mixed with a little moloſſes, and fermented, makes the ale generally drank at table; the water itſelf being of ſo light and penetrating a nature, that the drinking of it always cauſes dyſenteries: but thus corrected and turned into pruche or ſpruſs beer, is found very wholeſome, and of no diſagreeable taſte.

THUS the French of theſe parts live in the greateſt tranquility and comfort; and their happineſs might have ſtill continued had they themſelves not occaſioned the interruption of it. For though the two crowns of France and England were at war, and ſome of the ſubſtantial inhabitants here, as well as the Engliſh at Boſton, had fitted out privateers, the hoſtilities were never carried beyond the act of privateering, without any thoughts at that time of higher enterprizes. It muſt be obſerved, that before the war betwixt the two powers, at the beginning of this century, France was poſſeſſed of that peninſula and the lands called Acadia, weſt of l'Iſle Royale: but by the treaty of peace, in which France ceded to the crown of England, Placentia the capital of Newfoundland, and the whole iſland, this peninſula was alſo included, a ſuggeſtion which the court of England owed to its inhabitants, who being generally proteſtants, reaſonably promiſed themſelves more freedom under a ſovereign of their own religion. Many parts of that peninſula belonged to the inhabitants of Louiſbourg, who became deprived of them by this treaty: and among them one, concerning which there ſeems to have been a diſpute, whether it was to be included in Acadia or not. But the inhabitants ſtrongly inſiſting on the affirmative, and the king of England ſupporting their plea, France was obliged to give up the point, and conſent to its being reckoned a part of the peninſula. The owner of this parcel of land, however, who was one of the moſt conſiderable inhabitants of Louiſbourg, deſirous of recovering ſo valuable a part of his poſſeſſions, and availing himſelf of the preſent war, laid before the miniſtry of France his ſcheme for the conqueſt of it, without any charge to the king, with the allowance only of a body of troops from the garriſon; ſetting forth the great advantage which would reſult from it to the French intereſt in theſe parts. The miniſtry entered into his views; a commiſſion was ſent him for the expedition, accompanied with an order for furniſhing him with the number of regulars he had required.

The country in queſtion little apprehending any invaſion, was totally unprovided with the means of defence, ſo that after little or no reſiſtance, it was taken poſſeſſion of by the former owner, who, with the body of regulars and adventurers that had attended him, returned in triumph to Louiſbourg. In the mean time, the clamours not only of the ſufferers, who had been the immediate object of this act of violence, but of all the inhabitants of Acadia, reached the ears of the governor and other powerful perſons of

Boſton, who, alarmed at the recent example, began to look upon their own welfare as in danger . accordingly they held conſultations on the means of preventing further miſchief, and taking ſatisfaction for the late inſult : they with reaſon apprehended, that the French muſt carry all before them in a country like theirs, every way open, without fortreſſes or troops ; and they imagined that the French, from the facility of its execution, had really formed ſuch a deſign ; and that the firſt ſucceſs ſo eaſily obtained, would naturally animate that ambitious nation to greater enterprizes. This colony had ever looked upon the neighbourhood of the French as dangerous ; and in order to have them at a proper diſtance, the people of Boſton had made repeated ſolicitations to the court of England, that Acadia might be delivered up to that crown, in order to form a barrier betwixt the other dominions of the two powers.

THE reaſon that the colony of New-England, and its capital Boſton, is without any fortreſs or regular troops, is owing to the apprehenſion of its inhabitants, that they might be brought into ſubjection to the laws of England and acts of parliament, to the prejudice of thoſe liberties under which they have roſe to ſuch a height of proſperity. Thus the whole country lies open without any other defence than the great number of people it contains. The king of England ſends over a governor, but with ſuch a commiſſion as is entirely compatible with its free cônſtitution. This defenceleſs ſtate of Boſton awakened in them a jealouſy of farther enterprizes from the French ; that in a conſultation, at which the governor and the chief perſons of the colony aſſiſted, it was reſolved that New-England could not be ſafe by land or ſea, till the French were diſpoſſeſſed of Louiſbourg ; but that in order to ſucceed, the deſign muſt be conducted with ſuch impenetrably

penetrably ſecrecy, that the firſt notice of it at Louiſbourg muſt be the arrival of the fleet before it; and in Europe the account of its ſurrender: that the former might be prevented from ſending for ſuccours to Canada, and that a force might not be ſent from France ſufficient either to ſave or recover it. The governor of New-England at that time was Mr. Shirley, a gentleman of great abilities and merit; and the commodore of the men of war on that coaſt, was Mr. Peter Warren, a perſon of the like character, beſides his naval accompliſhments, and an ardent zeal for the glory of his nation; and who in this affair had the additional incentive of ſelf-intereſt, being owner of lands and houſes to a conſiderable amount; that he was looked upon as one of the moſt opulent inhabitants of Boſton. Theſe two officers, in conjunction with the chief inhabitants, determined to undertake the ſiege of Louiſbourg, the governor offering to concur in it with a body of land forces, proviſions and other neceſſaries; whilſt the commodore, who had ſignalized his courage on ſeveral occaſions, engaged with his ſquadron, though conſiſting only of three or four large ſhips and a ſmall frigate, ſo to block up the harbour, that no ſuccours ſhould be thrown into it; whilſt the land forces beſieged it in form. The greateſt difficulty was the want of regular troops, and experienced officers capable of conducting a ſiege; and the diſcipline of the ſoldiery, that there might be ſome probability of ſucceeding. This embarraſſment was removed by an expedient of Mr. Shirley's, and to which chiefly was owing the happy event of the expedition. There was a gentleman of the name of Pepperel, one of the largeſt traders in Boſton, who had a general correſpondence among the country people of the colony, both Indians and Meſtizos. He placed an entire confidence in them, and truſted them with whatever goods they wanted; and they were no leſs punctual in their payments at the time of their ſeveral harveſts. Theſe acts of kindneſs, and the open courteſy with which he always treated them, had endeared him to ſuch a degree, that they looked upon him as their father; and ſo ſenſible are even the rudeſt minds of diſintereſted beneficence and affability, that they on all occaſions expreſſed an unreſerved devotion to him; and no doubt was made, but they would readily ſacrifice themſelves for him at his deſire. On this confidence the governor of Boſton, propoſed to Mr. Pepperel, that he ſhould go general of this expedition; as thus all the country people would offer themſelves to go volunteers, and grudge no dangers or fatigues which they ſhould undergo in his preſence. Mr. Pepperel was not ignorant of his intereſt, and ſaw all the weight of the propoſal; but declined it, as being entirely deſtitute of that military knowledge required in much inferior poſts. At length yielding to the inſtances of the governor, and the entreaties of his acquaintance, who ſeconded the propoſal, he accepted of the poſt; and at once from merchant became a warrior. This was no ſooner made public, than multitudes of the country people flocked from all parts, deſiring to be enliſted, and impatient for the enterprize: rather from a zeal to accompany their chief protector, than for any concern about the conqueſt of Louiſbourg.

SUCH was the privacy of the enterprize, that even in England nothing of it was known till the execution. The governor had ſent notice of it to his ſovereign, but it went no further, leſt an enterprize undertaken with ſo much ſpirit, and of ſuch importance, ſhould be rendered abortive.

THUS the new raiſed troops with proviſions and military ſtores, but little ſuitable to ſuch an attempt, embarked at Boſton; and, in company with commodore Warren's ſquadron, ſailed for Louiſbourg;

which received the firſt notice of the deſign from the appearance of the armament.

I have already mentioned that France every year ſends a remittance to Louiſbourg of money and proviſions for the payment and ſubſiſtence of the garriſon; and for the repairs and improvement of the fortifications: at which the ſoldiers themſelves, when not on guard, very gladly work as being a comfortable addition to their pay. But through covetouſneſs, one of the general vices of mankind, thoſe who were commiſſioned with the payment of the ſoldiers, and even the very officers of the garriſon, beſides wronging them in what they earned by their work, curtailed them even in their ſubſiſtence money. This was no recent evil; and on the death of the governor, the foregoing winter, the oppreſſion of the rapacious paymaſters and officers roſe to ſuch an exceſs, as twice to occaſion a mutiny in the garriſon, and for want of timely lenitives, theſe reſentments contributed not a little to the loſs of the place.

The garriſon of Louiſbourg and all its forts, conſiſted only of ſix hundred French and Swiſs regulars, and eight hundred militia; formed of all the inhabitants capable of bearing arms. The governor of Canada, who was not ignorant of the diſcontented ſtate of the garriſon, and knowing that even with an unanimous zeal, it was not a ſufficient number in time of war for a place of ſuch conſequence, had, without any knowledge of what was on the carpet, offered to ſend a reinforcement to Louiſbourg. But the commandant, either apprehending that there would be no occaſion for making uſe of thoſe ſuccours, or that he judged the uſual force ſufficient for its defence, or for ſome other ſecret reaſon, thanked the governor of Canada for his offer, and told him that on any appearance of danger he would embrace it. It was not long after before he ſaw himſelf ſurrounded by the enemy; and all the ways for applying for ſuccour blocked up. Thus he became beſieged in form, his forces unequal to the defence of the place; and without any probability of receiving a reinforcement either from Canada or Europe. This was the firſt, and not the leaſt error to which his diſgrace for the loſs of Louiſbourg may be imputed, as with the ſuccours offered he would have found himſelf at the head of a body of men more than ſufficient not only to defend himſelf, but to ſally out and drive before them the raw undiſciplined multitude which were come againſt them.

THE deſign of the Engliſh having been to ſurpriſe the place when unprovided, they puſhed the enterprize with the greateſt diſpatch and vigour, that they might prevent the arrival of the annual ſupply from France: and with this view it was no later than the end of April or beginning of May, when they appeared before the town, in hopes of the double advantage, that inſtead of its reaching the French, the ſhips that brought it would fall into their hands, as it indeed happened. Another accident equally unfortunate with the former, was, that a man of war and a frigate having been fitted out at Breſt for carrying ſuccours to this place, and loaded with all kinds of military ſtores, and ready to put to ſea within two or three days, the man of war took fire, and was burnt to the water's edge. Nor was there at that time any other ſhip fit to ſupply her place, except the Vigilante, juſt on the point of launching. The captain of the ſhip which had been burnt, was the marquis de la Maiſon Forte; who alſo was appointed to command the Vigilante: and get her ready with the utmoſt expedition for the ſame voyage. This delay, however, gave an opportunity to the Engliſh of making themſelves maſters of the entrance of the harbour, and landing the troops for the ſiege, though they did not venture to open the trenches for battering in breach.

When the Vigilante arrived near the coaſt of this iſland, the atmoſphere was filled with ſuch a thick fog, that to have attempted to approach ſo near as to have a ſight of it, would have been dangerous: accordingly the marquis ſlackened ſail, and tacked till the weather ſhould clear up, that he might make the iſland without any danger. On the thirtieth of May, he diſcovered near him a frigate of forty guns, which he immediately knew to belong to the enemy; and elevated with the hopes of ſuch a capture, began to fire at the frigate, which, as had been concerted, feigned a flight; and, favoured by the fog, drew the Vigilante, which eagerly gave her chace to that part of the coaſt where the other ſhips of the Engliſh ſquadron lay: ſo that when the fog, which hitherto intercepted the ſight of diſtant objects, became diſperſed, the Vigilante found herſelf in the midſt of Mr. Warren's ſquadron. Then the frigate which had decoyed her into the ſnare, together with two men of war, the one of ſixty and the other of fifty guns, began about half an hour after one in the afternoon, to pour their fire into her, as a ſhip, whoſe ſafe arrival would have fruſtrated their enterprize. Another great diſadvantage to the Vigilante, beſides this ſuperiority was, her being ſo deep loaded with military ſtores, that ſhe could make no uſe of her lower tier. But neither this diſparity, nor the ſight of two other ſhips at a ſmall diſtance could intimidate the French from making a vigorous reſiſtance till nine o'clock at night, when the ſhip being battered in every part, full of water, and her rudder ſhot away, they ſurrendered; leſt their heroic courage might have been miſconſtrued to have proceeded only from a ſavage deſpair. To this misfortune France may attribute the loſs of that important place: for the ignorance of the beſiegers, whoſe conduct ſhewed them not to have a ſingle ray of military knowledge, the vigorous reſiſtance of the forts, which they now began more and more to think impregnable, the ſmall quantity of ammunition, and the proportion of the artillery to the deſign, together with the increaſing diſguſt of theſe new-levied ruſticks, at the fatigues and dangers of war, which had already laſted long beyond their expectations: theſe circumſtances, I ſay, had ſo diſcouraged the New-England men, that they began to repent of having left the repoſe of their plantations, for what ſome now called a romantick ſcheme; and the general inclination ſeemed to be for a return: and this being known from ſome of the Engliſh as bore none of the loweſt commiſſions, a reſolution was taken, that if they were not maſters of the place in a fortnight at fartheſt, the ſiege ſhould be raiſed. But the taking of the Vigilante, diffuſed a new ſpirit through the troops: and ſeeing that by this capture they had gained a conſiderable reinforcement, and that the fort was deprived of the aſſiſtance ſo long expected, their hopes of ſucceſs revived; and they puſhed the ſiege with more vigour than even at the commencement of it.

AT the ſame time the Engliſh laid ſiege to the fort, they alſo threatned the royal battery, having a body of troops encamped on that ſide, though without ever riſking an aſſault. This battery, happened to be commanded by an officer of no competent experience, and very unfit for ſuch a poſt; the garriſon alſo was weak, and it was without any guns towards the land, which was the very place facing the enemy; and conſequently the only one from whence they could be annoyed. In this exigence the commandant of the fort went over to view it and give directions; but as he could not ſpare any men, he left orders, that in caſe of the approach of the enemy on that ſide, they ſhould remove thither the guns which pointed ſeaward; and uſe them to the beſt advantage. But leſt the royal battery ſhould fall into the hands of the enemy, who would certainly turn the cannon againſt the fort, he left inſtructions with the commandant, that if he found it abſolutely neceſſary to capitulate, he ſhould with all his men, paſs over to the fort, after nailing up the artillery, ſo as to render it unſerviceable to the enemy. But the poltroon commandant of the battery availed himſelf of this inſtruction to haſten his retreat: and, without ſtaying till he had tried the ſucceſs of his cannon on the enemy, who continued quiet in their camp; that very ſame night embarked his men, and made over to the fort in a hurry, on pretence that the enemy had made an aſſault on the battery with a large force. But the falſity of this plea was ſoon diſcovered, the French flag flying for ſome time after; an evident ſign that there was no perſon in the fort to lower it: which could not have been the caſe had the Engliſh made the pretended attack.

The enemy obſerving from their camp, that no perſon appeared as uſual on the parapet of the royal battery, concluded that the garriſon were employed on ſome ſecret attempt, or on ſome works within the fort, and therefore did not make any approaches, till queſtioning whether the French might not privately have abandoned it, a Boſton Indian (for the Engliſh army was a medley of various kinds of people) leſs fearful than the others, offered to clear up the difficulty. Accordingly without any arms, as if diſordered in his ſenſes, he went in a rambling manner towards the gate: where, forſaken as it was, he had no great difficulty of getting into the fort; and immediately gave notice of its condition by lowering the French flag. On this ſignal the Engliſh army advanced with great alacrity to take poſſeſſion; and the artillery not having been well nailed up, was made fit for ſervice; and proved a very great detriment to the town, which it battered in flank.

All the guns of the royal battery were from 36 to 40 pounders, the Vigilante alſo carried ſome of the ſame ſize; all which the Engliſh, on being maſters of this fort, employed againſt the principal place; and under the ſhelter of theſe guns, which kept a very ſmart fire, they began their approaches, and raiſed forts for battering in breach. The place was bravely defended: but a large breach having been made, and every thing prepared for a ſtorm, it was thought proper to capitulate on honourable terms; which were readily granted by the Engliſh, not leſs out of eſteem for that valour which a concurrence of misfortunes had forced to yield, than from a deſire of putting an advantageous period to a ſtate of life, which had drawn them from their domeſtic concerns, and was not at all agreeable to their diſpoſition. The officers of the beſieged were not ignorant, that the moſt favourable opportunity of repelling the enemy, was to fall on them when they were beginning their works, in order to form their approaches: yet ſuch was the miſtruſt from the too recent mutinies of the regular troops, that though they themſelves made the offer, a ſally was not judged adviſeable, fearing that the ſoldiers in their preſent diſcontent, being once without the walls, would go over to the enemy, either from a dread of the puniſhments which they were conſcious their diſobedience deſerved, and would on ſome favourable opportunity be inflicted on them; or to be revenged for the oppreſſions which they had undergone from their commanders.

UNDER a combination of contrary events, and with a weak garriſon, this place held out a ſiege of ſix weeks; not ſurrendering till the end of June. By this ſucceſs England made an acquiſition of new dominions, and the colony of Boſton acquired an increaſe of territory, proſperous before throughout its large inland extent, it only wanted this iſland to command the whole coaſt: and Louiſbourg being now annexed to it, a ſhort account of this colony will not perhaps be unacceptable.

CHAP. VIII.

Of the ENGLISH COLONY *of* BOSTON, *its riſe, progreſs, and other particulars.*

THE firſt ſettlement of the colonies of New-England, the principal province of which bears that name, and has Boſton for its capital, was made in the year 1584 by Sir Walter Raleigh, tho' the firſt diſcovery of theſe coaſts is not to be attributed to him; Juan Ponce de Leon, having many years before, namely in 1513, given them the name of Florida, from his diſcovery of them on Palm Sunday; he was ſoon after followed by Lucas Vazques de Ayllon, a native of Toledo, who having been driven by a tempeſt on the eaſt coaſt of Florida, he afterwards employed an interval of fair weather, in coaſting, reconnoitring, and taking draughts of its capes, rivers, and bays; at the ſame time landing in ſeveral parts, and quietly trading with the natives.

RALEIGH took poſſeſſion of this country in the name of queen Elizabeth of England, and gave it the title of Virginia, a corruption as ſome think from that of the chief Cacique of theſe parts, who was called Viginea; but others, and indeed the generality, will have it to have been in honour of his ſovereign; and in alluſion to that princeſs's invariable averſion to marriage, which would have brought her into a ſtate of ſubordination; but to whoever the compliment was deſigned, whether to the Cacique or the queen, this is the name of that part of the coaſt which reaches from 38 to 45 deg. of N. latitude. Raleigh began to people it with his countrymen; and he found ſuch great numbers ready to embrace his propoſals, and ſecond any further enterprizes, that the ſettlement he had made, increaſed beyond expectation, and the country was divided into ſeveral provinces, beginning with the moſt northward, which lies in 45 deg. by the names of New-England, New-York, Pennſylvania, Maryland, and the moſt ſouthern retained its original name of Virginia. This laſt was the chief object of the attention of Raleigh, and afterwards of England: no meaſures were neglected for the peopling and proſperity of it. Hither particularly fled the unfortunate friends of Charles I. as an aſylum from the cruelties of Cromwell and his parliament, who, not ſatisfied with having embrued their hands in the blood of that monarch, by cauſing his head to be ſtruck off on a public ſcaffold, and by this action caſting a ſhade over the honour of the nation; now endeavoured to waſh off that horrid ſtain by the blood of others: and to palliate their tyranny, and give a colour of juſtice to their reſolutions, they pretended that all who did not conform to their pleaſure, were the king's adherents and malignants. In this dangerous ſituation, great numbers of honourable families were obliged to ſeek in other climates that ſecurity, which they could no longer enjoy in their native country.

These numerous emigrations not only enlarged the firſt towns in Virginia, but alſo occaſioned the building of many others. The royaliſts had made choice of Virginia preferably to any other part, as being ſure of the protection and countenance of Sir William Berkley, governor of that province, who abhorring the procedure againſt his ſovereign, maintained his loyalty unſhaken; refuſing obedience to Cromwell, and immediately declaring for the ſon of the late unfortunate monarch, as his rightful ſovereign: but though Virginia had received ſuch large additions by ſeveral vaſt emigrations of people, and though companies were erected in England for the ſupport of it, yet not receiving the neceſſaries wanted both for cultivation and defence, they had the mortification of ſeeing the province of New-York taken from them by the Dutch; who, deſirous of a ſettlement on this coaſt, twice diſlodged the Engliſh, reducing them within the limits of Virginia, till a peace was concluded betwixt theſe two nations on the 19th of February, 1674.

This was not the only diſgrace attending the Engliſh in theſe parts: for as the Dutch had drove them from New-York, ſo they were diſpoſſeſſed of other countries of Florida by the Spaniards, and of Canada by the French: and tho' they ſtill remained maſters of a conſiderable extent of country, yet their ſettlements were not ſo ſecure, ſo well eſtabliſhed, and placed on ſo good a footing as they have been ſince. This partly aroſe from the diſcovery of a tract of land betwixt New-York and Virginia; the ſoil ſo fertile, and the temperature ſo mild, that it was thought the peopling of it would be attended with greater advantages than that of any other of their colonies. This diſcovery, with the particulars, was fortunately publiſhed in England, at a time when ſevere perſecutions were carrying on againſt the Quakers, a ſect newly ſprung up, and which, like primitive chriſtianity, increaſed the more it was perſecuted, that now it numbered amongſt its members ſeveral perſons of a more elevated rank and greater abilities than its founders. Among theſe was one William Penn, who, both on account of his parents and his perſonal qualities, was univerſally eſteemed. To him Charles II. made a grant of the province, that he might withdraw thither with all his ſect; as thus it would become totally extinguiſhed, and policy hoped to accompliſh that by indulgence, which it had in vain attempted by rigour.

This grant was made to William Penn in the year 1681; tho' others date it from the year 1682. However, he ſet out with a numerous and well-provided company; and began to people the province which had been granted him, calling it Pennſylvania, from his own name, and the woodineſs of the country. In order to increaſe his numbers, and ſecure their ſtay by the ſtrongeſt ties, he made one of the fundamental laws of his colony, a general toleration, by which all who followed the precepts of morality, ſhould enjoy the free exerciſe of their religion, without moleſtation; which, with other privileges and immunities granted to the ſettlers, had ſuch good conſequences, that induſtrious perſons flocked thither from ſeveral parts, particularly the French refugees from England. The number of families increaſed in a ſhort time to ſuch a ſurprizing degree, that the firſt territory not being ſufficient for them, they ſpread themſelves along the neighbouring colonies on the coaſt; where their deſcendants ſtill continue. To theſe are owing the commencement and riſe of the town of Boſton, which, by the deſcription I have from many who have been there, may, for extent, wealth, and handſome buildings, vie with ſome of the moſt flouriſhing in Europe: nor is this the only place in ſuch happy circumſtances: Beſides the many towns on the coaſts, the inland parts, to the diſtance of one hundred leagues and more, alſo make a chearful appearance, being diverſified with large towns, villages, ſeats, and plantations. Thus, from the exuberant fertility of the country and the induſtry of the people, the nation reaps an immenſe benefit.

THE reſort of ſo many nations, which compoſe the inhabitants of New-England and the other provinces, renders them ſo populous and wealthy, that a conſiderable kingdom might be formed of them: for though its extent along the coaſt be not very large in compariſon of others in America, this deficiency is compenſated by its inland diſtance, and the great number of people it contains. Theſe inhabitants, though ſo different as to their native countries, are all ſubject to the ſame laws in reſpect of polity and civil government; and live in a quiet obedience to them and harmony with each other. As to religion, the original toleration ſtill obtains; and one ſees here all the ſects of Old England, and even thoſe of other proteſtant countries: but the Roman catholics, ſo far from being tolerated or connived at, are not admitted to ſettle in this colony.

All this country is of an extraordinary fertility, and particularly abounds in timber for ſhips; ſo that great numbers of veſſels are every year built in theſe parts, though the timber is not accounted the fitteſt for this uſe, as not laſting above eight or ten years, and therefore is made uſe of only for ſloops, bilanders, brigantines, and other veſſels of ſmall burden. Theſe large and wealthy provinces, ſuch as that of Boſton and the others, are ſubject to the ſovereign only, as agreeable to their own laws: the gentleneſs of the government to them ſecures their affection; and the governor ſent over to them from England is looked upon by the others only as one of their eminent fellow citizens; and beloved for his care of the publick welfare and the tranquility and ſafety of the whole ſociety. They allow him a competent ſalary: as they do alſo to the judges, for the more ſedulous adminiſtration of juſtice, without any further impoſt, tax, or demand. In order to prevent the leaſt encroachment on ſuch a ſtate of freedom, they allow of no fortifications or garriſons among them, that under pretence of ſecurity of their poſſeſſions their liberties may be in danger. Thus theſe provinces, in reality, conſtitute a kind of republick, partly admitting the political laws of England as depending on it; but either amends or rejects thoſe which may injure its immunities: the towns being the fortreſſes of the country, and the inhabitants the garriſons. Here is ſeen an univerſal concord, union, and friendſhip: the great do not deſpiſe or inſult the mean, nor the rich diſtinguiſh himſelf from the poor, by luxury, pomp, and an imperious carriage. Here alſo is none of that pernicious, diſhoneſt affectation of appearing above their circumſtances: and what is ſtill more admirable, that though five or ſix different ſects are openly profeſſed, we ſee none of thoſe feuds which naturally ariſe among perſons of different perſuaſions. Nor do the inhabitants, notwithſtanding they are compoſed of ſuch different kinds, as Europeans, Creoles, Meſtizos, and natives or Indians, the latter of which are intractable and ferocious, ever offer to diſturb the government; but imitate, in this particular, the peaceful behaviour of the others. This ſociable conformity greatly contributes to the increaſe of theſe colonies; for as many of the cauſes of the decay of families do not ſubſiſt here, nor is there any thing to create private differences, the repoſe in which they live, naturally induces young perſons to marry; and the rather, as there is no difficulty in providing a ſubſiſtence: a quantity of fertile land being allotted to every one who petitions for it. Thus the territories of the colony increaſe, and as they increaſe are cultivated.

THE marquis de la Maiſon Forte having been carried to Boſton after he was made priſoner, drew up an exact account of this colony; and was pleaſed whilſt we were both priſoners at Fareham in England, to communicate it to me: and it is from thence I have chiefly extracted the foregoing account. The marquis is of opinion, that within a century, Boſton, in extent and number of people, will form a kingdom ſuperior to that of England; and will be able to give law to all the neighbouring countries. This conjecture he deduces, and not without probability, from its amazing progreſs ſince the time of its firſt eſtabliſhment; nor can it well be doubted, when at its commencement, as I may ſay, it had a ſpirit ſufficient to undertake the conqueſt of ſuch a place as Louiſbourg; and a conduct to accompliſh it; ſo that it is reaſonable to expect, that with the future increment of power and people, it will exert the ſame ſpirit and conduct to remove by force all obſtacles to its greater aggrandizement: eſpecially as they can meet with little reſiſtance, the whole country being, as it were, deſtitute of inhabitants.

But it muſt be obſerved, that though theſe colonies are ſo large, fertile, well peopled, and flouriſhing, yet the current money is not of metal, but of paper, in the form of common coin, being two round pieces paſted together, and ſtampt on each ſide with the arms of the colony: and of this there are pieces of all values from the loweſt to the higheſt; and with theſe they buy and ſell without making uſe of any metallic coin whatever. But as theſe are liable to grow foul, or break with uſe, there is a particular houſe which may be called a kind of mint, this paper-money being made there; and another in every town for the diſtribution of it. To theſe houſes are brought all ſuch pieces as from any cauſe whatever can no longer paſs current: and here others of like value are iſſued in the lieu of them. In this particular the diſintereſtedneſs and probity of the directors of this money are really admirable, as having it in their power to enrich themſelves by cauſing great numbers of this ſpecie to be ſtruck, and putting them in their own purſes.

The houſes for diſtribution of this money receive remittances of new from the chief houſe at Boſton, and paſs accounts with the directors by ſending thoſe which have been brought for exchange. And ſuch is the integrity of theſe judges, that even a ſlight ſuſpicion of being capable of a fraud would be an injury to the high reputation in which they ſtand. But what ſeems ſtrange and almoſt incredible is, that they, in whoſe power it is to give what value they pleaſe to the paper, by the ſtamps, of which they have the care, never have been known to abuſe their truſt: but the wonder ceaſes upon reflecting, that the former eſtabliſhment of theſe colonies is in a manner owing to Quakers; and that, to the laws which they and the firſt ſettlers compiled, the colonies chiefly owe that quiet and proſperity they ſtill enjoy. The Quakers are a kind of ſectaries, who though zealouſly fond of ſeveral ridiculous and extravagant notions, cannot be ſufficiently commended ed for their punctual obſervance of the laws of nature: ſometimes they carry this ſtrictneſs to ſuperſtition; and from this principle all the penalties laid on them in England could not bring them to take the oaths required by the government, ſo that at length they obtained from the parliament, that the ſimple affirmation of a Quaker ſhould have the ſame force as an oath, except in capital caſes. As they make ſuch a ſtrict profeſſion of truth, and lay down as a fundamental article of their belief, the neceſſity of inviolably adhering to their affirmation, they alſo make profeſſion of candour, juſtice and ſimplicity in all their dealings; and it is a thing well known, that all treaties, agreements and conventions made with Quakers, though only on their bare word, prove better founded and fulfilled, without any of that chicane and delay, which ſo often occurs in thoſe with other people, though corroborated by bonds, witneſſes and ſecurities. Such perſons as theſe having the direction, diſtribution and making of the money in the colony of Pennſylania, and others where it is current, the inhabitants are under no manner of concern with regard to any malverſation; nor can it morally be expected, for ſuch a breach of truſt would be a total departure from their faith. This has been their uniform conduct: and as this ſect has greatly increaſed in theſe colonies, they have always ſtrictly adhered to their ceremonies and rules; and irreproachably obſerved the maxims tranſmitted to them by their anceſtors; and this probity has doubtleſs communicated itſelf to the members of other religions, that among thoſe people to harbour the ſlighteſt ſuſpicion concerning the diſintereſtedneſs of their magiſtrates, would be an injury; thoſe virtues being as common here as they are rare among other nations.

THE traders ſell all their European goods in exchange for this money; and with it buy thoſe of the country; and conſign them to their correſpondents in other parts for vent: and having made up their gains in ſilver or gold they remit it to the bank in London: and as in their own country they ſtand in no need of coined gold or ſilver, they purchaſe with the yearly returns of their gains ſuch goods as they want: and theſe they ſend to Boſton on their account. Thus the commerce is every where kept up; and the ſilver and gold ſpecie remain in England. The wealthy inhabitants of Boſton have at the ſame time two capitals; one in effects and paper-money; and the other returns from the bank, where the principal reſts without any diminution.

Having given this ſhort account of the happy ſtate of theſe Engliſh colonies; and the means by which they are maintained, I ſhall add, as a concluſion of this ſubject, that the unfortunate Delivrance was not the only ſhip deceived by the falſe appearance of Louiſbourg being ſtill in the hands of the French. The ſame fate befel the Charmonte and Heron, two homeward-bound Eaſt-Indiamen; and who had orders to touch at no other port than Louiſbourg, where they would find a ſquadron of men of war, under whoſe convoy they might ſafely reach Europe.

CHAP. IX.

Voyage from LOUISBOURG *to* NEWFOUNDLAND; *account of that Iſland, and the Cod fiſhery: and alſo of our voyage to* ENGLAND.

I SHALL not trouble the reader with an account of the diſagreeable circumſtances of our captivity at Louiſbourg; but juſtice and gratitude will not permit me to paſs over the humanity of Mr. Warren, commodore of the Engliſh ſquadron; who, among many other inſtances of his kindneſs to us, beſides the honour of his table, which I ſeveral times enjoyed, recommended my papers to the care, and myſelf to the good treatment of the captain of the ſhip who was to carry me to England.

On the 5th of October, arrived at Louiſbourg a packet-boat, which had been diſpatched for England with the news of the taking that place; and brought with her, grants from the king of England of the title of baronet to Mr. Warren, and to Mr. Pepperell; alſo two commiſſions for the former, appointing him governor of the iſland, and rear admiral of the blue; and to the latter a colonel's commiſſion, accompanied with many gracious expreſſions, relating to the behaviour of theſe gentlemen. News at the ſame time arrived that a ſquadron of men of war was ready to ſail with a convoy, having on board two thouſand regular troops as a garriſon to the new conqueſt, and ſix hundred perſons of both ſexes towards peopling it, with proviſions, military ſtores, and every thing neceſſary to put it in a poſture of defence, in caſe the French ſhould attempt to recover it. The expectation of this ſquadron was the only thing that delayed the other at Louiſbourg, it being deſigned to convoy the Newfoundland fleet; and the time of its return to Europe now drew near. And as the arrival of the former could not be far off, preparations were making for our departure: and the priſoners of the three prizes, together with the few French families which remained diſperſed in their dwellings on the iſland, and on that of St. John, were to be diſtributed on board the ſhips of the ſquadron. I was ordered on board the Sunderland, commanded by captain John Brett, with whom my misfortune had before procured me ſome acquaintance; as likewiſe the captain and officers of the Delivrance with others; one of theſe was Monſieur de Baubaſtin, a perſon of great note in Louiſbourg; and who, as captain of the militia, was the more able to acquaint me with ſeveral particulars relating to the ſiege, in which I have reaſon to believe he did not ſpare himſelf.

On the 4th of October, we embarked on board our reſpective ſhips. The ſquadron conſiſted of the Princeſs Mary, commanded by captain Edwards, who as oldeſt captain was commodore, the Sunderland, the Superbe, and the Canterbury: the three firſt of ſixty guns, and the laſt of forty-ſix or fifty. The Heron and Charmante had alſo been fitted up as armed ſhips: the only ones remaining in the harbour, being the Vigilante, now repaired from the damages ſhe had received in the action, and the Cheſter.

My papers, as I have before obſerved, Sir Peter Warren delivered to captain Brett, with orders on his arrival in England to remit them to the admiralty. On the 19th of October, the ſquadron put to ſea, ſteering for Newfoundland. On the 22d, in the evening we had ſight of Cape Raze. On the 23d the wind being at S. W. the ſquadron tacked for the bay of Bulls, where it intended to anchor; but that being found impracticable, on the 24th it entered that of Ferryland, and remained there till all the merchant ſhips, which were taking in their lading of cod in the other harbours of the iſland, had rendezvouſed: the method of this fiſhery and commerce, as likewiſe the iſland itſelf being little known in Europe, I ſhall give as good an account of it, as my late ſituation will admit of; the moſt innocent queſtions or undeſigning remarks, being ſuſpicious in a priſoner.

The capital of the iſland of Newfoundland, ſo famous for the cod-fiſhery along its coaſts and the neighbouring ſeas, is Placentia. Its firſt diſcovery and peopling was owing to the Spaniards before the year 1550, as the very name of the capital, and ſeveral other capes and parts of it, as Cape Buena Viſta, Punta Rica, ſufficiently demonſtrate. But probably the ſettlement they made here was of little force; for in 1583, Humphry Girber an Engliſhman ſettled there; though he was afterwards obliged to evacuate it, and ſail for England in the following year; but did not reach it, periſhing in a ſtorm.

IN the year 1622, the Engliſh again returned to ſettle in this iſland, under the conduct of Mr. George Calvert, who, with more foreſight than his predeceſſor, brought with him all kinds of ſeeds, grain, and pulſe, and immediately ſet his followers to work in clearing thoſe parts which ſeemed beſt adapted to culture; and accordingly the produce of his ſeeds contributed greatly to the comfortable ſubſiſtence of theſe new adventurers, beſides affording a ſtock for the enſuing years.

THE French had for a long time been in poſſeſſion of Placentia, and with it of the principal part of this iſland, but without any moleſtation to the ſettlements of the Engliſh on the eaſtern coaſts of it; and the veſſels of both nations quietly fiſhed together. The Engliſh, however, long entertained a deſire of making themſelves maſters of Placentia, as the only fortified town in the iſland, as alſo of the whole ſouthern part held by the French. They had tried force and negociations to compaſs their ends; but all their endeavours ended in diſappointment, till the peace of Utrecht, concluded betwixt that nation and Lewis XIV. of France; when they took advantage of the low ſtate to which that monarch was reduced, and inſiſted on the entire and abſolute ceſſion of Newfoundland; and ever ſince that time no other nation has ſettled there; though with a reſerve of the right of cod-fiſhing both to the French and Spaniards; to the former by articles nine, ten and twelve of that ceſſion; and to the Spaniards by the 15th article of the ſame treaty.

THE country of this iſland is very unequal, and covered with hills and mountains; and theſe at a diſtance appear much higher than thoſe near the ſea.

They are alſo every where overgrown with pines or pruches, as the French call them, ſo as to be practicable only in thoſe parts, where the inhabitants have cut roads. This ſpecies of pine ſeldom exceed the height of two or three toiſes in the open parts; but in valleys where they are ſheltered from the froſt and the piercing winds, they riſe to a much greater height. In winter the cold is exceſſive here, nothing but ſnow and ice being ſeen; and the bays and harbours entirely frozen. This ſevere weather ſets in ſo early, that though it was but the 21ſt of November when we were there, it froze to ſuch a degree, that we were obliged to wait till the ſun had begun to break the ice; and thus force a way through without waiting till the next day, leſt the froſt ſhould return; and then it would have been impoſſible, and the ſhips under the dreadful neceſſity of wintering among the ice.

This is the more remarkable, as the latitude of Placentia is only 47 deg. 10 min. and the bay where we happened to be was but little more. The inhabitants of the iſland keep themſelves ſhut up in their houſes during the winter, except in fair and ſun-ſhiny weather, when they go out with a great deal of pleaſure to enjoy the enlivening rays of the ſun.

The whole circuit of the iſland is full of bays and harbours, all ſo ſpacious and ſheltered on all ſides by the mountains except their entrance, that the veſſels lie in perfect ſecurity; they all grow gradually narrower from their entrance, that at the end of them, there is ſcarce room for a ſingle veſſel to anchor. Some of theſe harbours are a league and a half or two leagues in length; and their greateſt breadth about half a league. But there are alſo others much larger and ſome leſs; into them run ſeveral rivers and brooks, which beſides the fineneſs of their water afford great quantities of trouts and other kinds of freſh water fiſh, ſeeming to vie with the ſea in fœcundity. Theſe harbours are complete anchoring places, being clear, and having a good bottom, that they may be ſafely ſailed into without a pilot. Some there are with reefs of rocks, but theſe are generally viſible; and thoſe that are covered, are uſually about the capes or points at the entrance of the harbours: and therefore by keeping in the middle all danger is avoided. Theſe harbours are ſo near each other, as to be openly ſeparated by a point of land, which ſeldom forms a diſtance of above two leagues; ſo that the whole coaſt of the iſland, is a ſucceſſion of harbours. But it is not in all that the Engliſh have any town or village; and theſe, which are to be found only on the larger bays, and where the nature and diſpoſition of the country are moſt convenient for a ſettlement, are ſmall, and the inhabitants but few. Cod-fiſhing is the univerſal buſineſs; and beſides their dwellings they have offices and ſtorehouſes for preparing and laying up their fiſh till the time arrives for ſending it into Europe, on their own account, or ſelling it to veſſels which come there to purchaſe it in exchange for European goods. None of theſe villages are without a fort or battery for their ſecurity in time of war; but theſe are ſo inſignificant, that the moſt they could do would be to drive away ſome petty privateer. The greateſt extent of this iſland is from N. to S. being ninety-five leagues, that is, from cape St. Mary, in 46 deg. 55 min. to the north cape, which forms the ſtreights of Belliſle in 51 deg. 20 min. And the diſtance from E. to W. that is, from cape Raze to cape Cod, is eighty leagues. But the ſettlements of the Engliſh are only about the harbours and in the country near Placentia; and along its bays eaſtward towards cape Raze, and from thence to cape Buena Viſta: all the remainder both up the country and along the coaſt, northwards towards the ſtreights, and from thence weſtward, is entirely deſart. This muſt however be imputed to the rigour of the climate, and the badneſs of the ſoil, more than to any neglect of the proprietors, who ſeldom are wanting in induſtry, when they have a probability of ſuitable advantages. The inhabitants relate, that it was formerly peopled by a race of ſavage Indians, who ſince have retired to the continent; nor do they often viſit the iſland, and even when they do, they ſtay but a very ſmall time, returning to the continent from whence they came. This was indeed their cuſtom before ever the names of French or Engliſh were known in the iſland, retiring from the ſeverity of the froſts at the approach of winter. Theſe Indians generally live by fiſhing and hunting; and both this iſland, the iſle royale, and the adjacent parts of Canada, abound in buſtards and wild geeſe. There are alſo found, though in no great numbers, the quadrupeds of this country, as foxes, bears, beavers, and others: but the continual ſearch after them for the ſake of their ſkins has much leſſened their numbers.

Under all the ſeverity of the climate, they are not without ſome horned cattle; but theſe are preſerved with no leſs care and difficulty than at Louiſbourg. The inhabitants have alſo their little kitchen gardens for ſummer herbs: but all the other ſpecies of proviſions, as flour, ſalt, meat, &c. they are ſupplied with from Boſton, Pennſylvania, and other colonies to the ſouthward. With regard to the goods of other kinds, they are brought from England.

Having obſerved in chapter ſeven that the greateſt part of the French ſhips employed in the cod-trade do not take in their lading at Louiſbourg, it will be neceſſary to explain the nature of this trade; and in order to a more clear underſtanding of this traffick it is to be obſerved, that the ſhips both of that nation and thoſe of England, have two methods of carrying it on; one is to go to the fiſhing villages, and there buy a cargo in barter for goods, or to load with cod on their owners account; the other is to employ the ſhip's company in fiſhing in the inhabited bays; and for this the French make uſe of the harbours on the weſt part of the iſland of Newfoundland, which as being deſart, and likewiſe an article ſtipulated in the treaty of peace, nò oppoſition is made to it: for this ſeems to me the meaning of the expreſſion often occurring in the treaties, *That the Engliſh ſhall admit the French and Spaniards into the harbours of Newfoundland:* and not as ſome inſiſt the harbours where the Engliſh have ſettlements, they having reſerved theſe for their own conveniency. This certainly is the moſt natural interpretation, for the latter being their dwelling and the beſt part of the iſland, it is not to be thought that they would give them away to others, the convenience of harbours being the ſole and chief advantage of this iſland: and this was the only point in view amidſt the conteſts of nations for the poſſeſſion of a country valuable only for the fiſhery; and where the inhabitants, at leaſt two-thirds of the year labour under all the inconveniences and hardſhips of deep ſnows, hard froſts, and other rigours of winter.

THE weſtern coaſt of this iſland, diſtinguiſhed by the name of Petit Nord, and no leſs provided with bays and harbours than thoſe inhabited by the Engliſh, forms the department where the French veſſels repair to fiſh; as likewiſe north beyond the river of St. Laurence; and ſtretching eaſtward forms Belliſle ſtreight. In all theſe parts it is an inviolable rule, that the veſſel which comes firſt has the privilege of chuſing her bay, and the beſt part in it for fiſhing; and likewiſe has the title of admiral of it: and as ſuch not only all the timber works which happen to remain there belong to the maſter, but he alſo aſſigns to every veſſel her particular birth, though herein he has always a regard to the date of their coming into the bay: and during the whole time of the fiſhery, he carries a flag at his main-top-maſt head. This diſtinction and the advantage of chuſing the ſtation for fiſhing, are ſuch powerful incentives to expedition, that tho' the harbours are generally frozen in the months of March and April, ſome ſhips arrive there during theſe months, and ſecure to themſelves the beſt ſtations, and build huts beforehand, by ſending ſome of their crew in their long-boats, when the ſhip is at the diſtance of fifty leagues or more from the coaſt; tho' it muſt be acknowledged, that this ardor is often attended with fatal conſequences; the boat during the darkneſs of the nights running on the large iſlands of ice common on the coaſt; and ſometimes founder in ſtorms, which are here very ſudden and violent. But theſe dangers are all overlooked by an attachment to gain and frivolous ambition. The ſucceſs or failure of this fiſhery depend indeed in a great meaſure on the ſtation of the ſhip, and the conveniences for curing the fiſh. Beſides as the wages paid by the owners to the maſter, petty officers and men, is always one third part of the ſound fiſh brought to Europe, the ſhorter the time, the greater is the advantage to each man on board.

Though all the coaſts of Newfoundland may be ſaid to abound in cod, yet in ſome parts it is found in greater numbers than in others, and ſome there are which produce few or none. This proceeds from the quality of the bottom; for thoſe parts where the bottom is ſandy are fuller of fiſh than where it is rocky; but if the bottom be muddy, fiſh are very ſcarce: likewiſe in a great depth of water the fiſh are not caught in that plenty as when it does not exceed thirty or forty fathom. For though cod be found at a greater or leſs depth, yet this ſeems to be that which the cod moſt delight in.

Such are the motives for which the maſters of veſſels in this trade are ſo eager to be among the firſt, that they may chuſe their ſeveral conveniences, in order to finiſh their fiſhery with the greater diſpatch; and returning early to Europe, may turn their cargo to a better account.

WHEN a ſhip has taken her ſtation, ſhe is immediately unrigged; and at the ſame time a fit place choſen for ſecuring the fiſh, as it is prepared: huts are likewiſe run up for the men who work aſhore, ſo as to form a kind of village; and at the water's edge is alſo built a large ſtage or ſcaffold. Here the number of launches deſigned for the fiſhery is got ready, and when built are left there till the following year; when he who firſt enters the bay, has the privilege of applying them to his own uſe. Every thing being ready, the whole ſhip's company, officers included, without exception of any one, are divided into as many claſſes as there are occupations: ſome fiſh, others cut off the heads, others gut the fiſh, which the French call habiller; whilſt others have the care of ſalting and laying them up. The fiſhers ſet out very early in their boats, that they may be at their ſtation by break of day, and do not return till the evening, unleſs they happen to have caught their boat-load before. This fiſhery is all performed with the hook; and every boat is provided with a ſufficient quantity of all kinds of fiſhing-tackle, to be ready at hand in caſe of any accident, as breaking a line or the like. On their return the fiſh is delivered to thoſe who open them; and that this may be done with the greater diſpatch, a boy ſtands by to hand them to them and take them away when cured. This work is done in a methodical manner; for he who beheads them does nothing elſe. They are opened with one cut lengthwiſe, their back-bone, and all their entrails are taken out; and another immediately taken in hand, and the offals thrown into the ſea. While ſome open, others ſalt, and others again pile up; and all this is done with the greateſt care and regularity. The next day, or when the ſalt appears to have ſufficiently penetrated, they waſh them, and take them in pairs by the tails, then ſhake them in the water in order to carry off the ſcum extracted by the ſalt: afterwards, that the water may run off, they are piled up on little boards; then they are ſtretched out one by one, with the ſkin upwards, in order for drying, where they are turned three or four times. Being thus thoroughly dried, they are piled up in ſmall parcels, that they may not entirely loſe the heat communicated to them by the firſt ſalt: and now being ſalted a ſecond time, they are laid up in regular heaps on the ſtage; and there they remain till the time of ſhipping them. As the boats go conſtantly every day, the work of the ſeveral claſſes may be imagined pretty hard and fatiguing. On the return of the boats they immediately begin with opening and ſalting the fiſh, which takes up the greater part of the night; and the ſucceeding parts of the curing above-mentioned neceſſarily keep them employed the following day, when the return of the barks call upon them to renew their taſk; that thus they have very few hours left for ſleep and refreſhment. There are two kinds of cod, as to their quality; and of each three ſizes. Both have a line running from the gills to the tail; following the figure of the belly of the fiſh, and winds a little downwards from the head to the tail; but this is more diſtinct in one ſpecies than the other: and the whole fiſh from this line to the back is of a dark brown, whilſt the lower part is ſpotted with white. The connoiſſeurs in fiſh ſay that this is better than the other; the whole body of which is of a darkiſh white with reddiſh ſpots; but the belly and all its hinder parts the whiteſt. I ſhall not enter into an account of the diſproportion of its head comparatively to the other fiſhes, or the quantity of oil made from it and the livers, which are alſo very large.

As to the ſpecies diſtinguiſhed by their ſize, the ſtandard cod is that which is two feet in length with the head off. The ſecond is ſmaller, called the middling: the third is the leaſt. The dealers in this commodity however ſubdivide it into ſeven or eight kinds: one of theſe is a fiſh in the opening of which, or in ſevering the head, ſome fault has been committed.

Another kind of fiſhery; but followed more by the French than any other nation, is that of the Mud-fiſh: and they cure it in the following manner. This fiſh is caught on the great bank of Newfoundland; and others as far as ſandy iſland ſouth of L'iſle royale: and as ſoon as it is caught it is opened, ſalted and laid in little piles in the hold of the ſhip, till it has ſufficiently purged; then they ſhift its place, and having ſalted it a ſecond time, ſtow it for the voyage. The ſhips intending for this fiſhery repair to the bank in the beginning of February: as that caught in ſummer, that is, after June or July, or any of the banks, is inferior to that caught at the end of winter, theſe ſhips finiſh their fiſhery and return to Europe with ſuch diſpatch, that ſometimes they are known to make two voyages in a year. For 'tis the ſouth part of the bank that this fiſh chiefly haunts: and theſe likewiſe are accounted better than thoſe taken on the north.

The cod appears to be one of the moſt prolifick kind of fiſh. Of this there needs no other proof than the great number of ſhips which annually load with it only from this iſland: and it is only known in theſe ſeas; for though the Britiſh channel and the German ocean are not without this fiſh, their numbers are ſo inconſiderable comparatively to thoſe of Newfoundland, that they may rather be looked upon as ſtragglers. Some perſons of long experience in this fiſhery, informed us that the cod ſpawns twice a year; and beſides the infinite number of their animalculæ, it is very ſeldom that any of them miſcarry; for they depoſit them in the ſand; and thus by a natural inſtinct they are laid on theſe banks, to which they adhere; without being ever removed by any agitation of the waters, till impregnated with life. The cod alſo delights to continue at the bottom; at leaſt is never ſeen on the ſurface of the water. But though their number is ſtill immenſe, they are evidently diminiſhed, a proof of this is, that much fewer are now caught in the ſame ſpace of time, than there were twenty-five or thirty years ago.

The coaſt of the continent oppoſite to Newfoundland is inhabited by Indian ſavages; and though the crown of France keeps poſſeſſion of it for the conveniency of the fiſhery; it has no proper ſettlement: and was repreſented only by a perſon who ſollicited and obtained, without much difficulty, the title of governor of theſe countries. He kept up a good correſpondence with the Indians, and lived among them. The winters he ſpent ſolitarily with his wife and family; in ſummer time he enjoyed the company of the maſters of the fiſhing veſſels. Thus he ſpent many years, and as I have been informed, it was not till this preſent year 1745, or a little before, that he retired to Canada; and rather out of indulgence to nis wife's fears of ſome misfortune in the preſent war, than from his own inclination. Theſe Indians live very eaſily with the French, come to their huts, and bring them game in exchange for brandy, wine and toys; but are much addicted to theft, as many ſhips have experienced by the loſs of their ſails and other parts of their furniture when aſhore; ſo that it has been found neceſſary to keep a conſtant guard; and for greater ſecurity, the tents and huts are ſo diſpoſed, as entirely to environ on the land-ſide as in a fort the whole ſpot of ground where their other neceſſaries are kept. Theſe precautions and the known alertneſs of the French on any ſudden alarm, have diſheartened the Indians, that of late, deſpairing of ſucceſs, they ſeem to have deſiſted from their pilfering practices.

The manner of the Engliſh fiſhery on the bays of the eaſt coaſt of Newfoundland, is carried on in the ſame manner as that of the French before deſcribed; and whether it be that the great bank lies neareſt, or that its bottom is ſuch as this fiſh moſt delights in; and where conſequently it is more numerous than in the weſtern parts, that nation choſe theſe parts preferably to the others, as the French do not frequent the weſtern parts ſo much as the Petit Nord.

The froſts being ſet in, laid our ſquadron under a neceſſity of haſtening out of this bay, which it left on the 21ſt of November, with the veſſels under its convoy; and in the offing was joined by many others, ſo as in the whole to form a fleet of betwixt ſixty and ſixty-five ſhips of all ſizes: and among theſe were two frigates of forty guns, who had continued cruiſing in theſe parts to ſecure the fiſhery againſt any attempts of the French privateers. Our voyage to England afforded nothing remarkable; and on the morning of the 22d of December, the ſquadron anchored in Plymouth-ſound, except the Sunderland, which kept on her courſe with a conſiderable part of the convoy, and at three in the afternoon came to an anchor in Dartmouth-road.

Whilst our ſquadron lay at Newfoundland; and in the paſſage to England, it met with ſeveral ſtorms, which I ſhall ſpecify in order to convey ſome idea of what may be expected in theſe ſeas. On the 3d of November, the wind blowing freſh at W. and with all the appearances of a violent ſtorm, the wind abated and the weather cleared up. But on the tenth of the ſame month we had a ſtorm at N.W. laſting from two in the afternoon, till two the next morning; and on its decline ſnow and ſhowers. On the 14th it began to blow freſh in the morning; and at noon came on a ſtorm no leſs violent than the former, at N. E. and E. N. E. It continued in this point till the 15th, when in the morning it ſhifted to the north, though blowing ſtill with the ſame force; but at four in the evening it began to abate. This was ſucceeded by thick ſnow: and on the 17th, and the days following, came on thoſe froſts which obliged the ſquadron to haſten its departure from that iſland.

Whilst we were on our voyage, namely on the 22d of the ſame month of November, we had hard gales at eaſt, which on the 23d increaſed to a direct ſtorm, that laſted with all its violence till the 26th, when the wind came about to S. W. and the fog which had covered the whole atmoſphere cleared up. On the 27th of the ſame month, it began to blow hard at S. W. and thus continued at the ſame point and at S. and W. without abating in violence till the 4th of December; when ſhifting to the N. W. we had fine weather. Afterwards the wind was at N. W. and N. and from thence veered to the N. E. and E. where it continued with ſome violence till the 21ſt of December; on the evening of which it came about to the S. and S. S. W. that the fleet was obliged to work up the channel. In 48 deg. 45 min. lat. the lead was hove, and found 78 fathom water, with a bottom of fine white ſand, which is the particular mark of the entrance of the channel.

Dartmouth harbour is a kind of road or open bay, at the end of which ſtands the town of that name. The country is delightfully interſperſed with ſeats and farm-houſes; which, with the various cultivation of the hills and plains, the verdure of the paſtures, and the hedges ſeparating the fields, make a moſt agreeable appearance; and ſhew the goodneſs of the ſoil, and the induſtry of the inhabitants. We ſtayed here no longer than till the wind favoured our proceeding to Portſmouth, which was the rendezvous of the whole ſquadron; and on the 28th the wind veering to the S W. and W. we got under ſail; and on the 29th the ſhip anchored at Spithead, where at that time lay ſeven three deck ſhips carrying from 90 to 100 guns. From the ſhip I was carried to Fareham, a pleaſant village at the upper end of Portſmouth-harbour, and about three leagues by land from the town. This being appointed for the place of my captivity, and of thoſe who had been included in the capitulation of Louiſbourg: the fate of the others was to be confined in the common priſon at Portcheſter caſtle. The commiſſaries indeed could not well take upon them to diſpenſe with the ſtrictneſs of their orders. I muſt not here omit the courteſy and generoſity of captain Brett of the Sunderland, to all the priſoners of any rank, whom he not only admitted to his table during the voyage; but prevailed on all the other officers to imitate this good example; and who ſeemed to vie in civilities towards us, and humanity towards the inferior ſort; ſparing for nothing to alleviate our misfortunes. And let this remain a monument of my gratitude to ſuch a generous ſet of gentlemen.

We arrived in England at the time when Charles Edward eldeſt ſon of the Chevalier de St. George landed in the north of the kingdom, among the Scots Highlanders; and was by their aſſiſtance endeavouring to recover the throne of his anceſtors; though with how little ſucceſs is now known to all the world. Theſe commotions left little hopes of a favourable reception to us priſoners, whoſe long ſufferings and hardſhips naturally cauſed more ardent longings after eaſe and liberty: and the jealouſies, which in ſuch caſes are only a prudent care, together with the irregularity of ſome priſoners, who, contrary to the rules of honour, abuſe any indulgence ſhewn them, and violate their parole, occaſioned an order for abridging the priſoners of ſeveral privileges they had before enjoyed, and confining them with greater ſtrictneſs. However, the favours which Mr. Brookes, commiſſary for the French priſoners, and Mr. Rickman, who acted in the ſame capacity for the Spaniards, were pleaſed to ſhew me, were accompanied with ſuch politeneſs and cordiality, that I became entirely eaſy under my preſent condition, and even the reflection on my misfortunes grew leſs painful. Here I could expatiate in the praiſe of theſe two gentlemen; the former to his learning, abilities, and addreſs in the conduct of affairs, added the moſt endearing humanity, of which all the priſoners in his department felt the good effects; but I ſhall not inſiſt on a character, the brightneſs of which would be but obſcured by the praiſes of my inſufficient pen.

The commiſſary for the Spaniſh priſoners, was Mr. William Rickman, under whoſe care conſequently I ſhould have been, without the circumſtance of having been taken in a French ſhip: yet my being a Spaniard recommended me to his kindneſs, which I with gratitude own he carried to a very great height; and I had a large ſhare of thoſe acts of goodneſs by which he has deſerved the univerſal acknowledgement of the whole Spaniſh nation. For from the beginning of the war, and the taking of the Princeſſa, he exerted all poſſible care for the comfort of the common priſoners; and the chief officers he even lodged at his own ſeat, and many others at an adjacent farm-houſe, about a quarter of a league from Titchfield in the London-road, called Peſbrook, and about three miles from Fareham. He made public and private ſolicitations in their behalf; he treated all with affability, and uſed the greateſt diſpatch in their ſeveral affairs: he raiſed charitable contributions, which were chiefly laid out in apparel for thoſe of the lower claſs; and the officers he in the moſt genteel manner furniſhed with money, that they might live in tolerable decency.

BOTH the abovementioned gentlemen offered to join their intereſt in ſoliciting the admiralty for my papers, which was the thing I had moſt at heart; but I judged that Mr. Brookes, being the commiſſary to whom I belonged, it would come beſt from him to incloſe my petition, with his recommendation to the duke of Bedford, and the admiralty, that they would be pleaſed to order my papers to be examined for their ſatisfaction, and then return them to me. The anſwer was entirely becoming the generoſity of that nation among which the chance of war had brought me: this was, that the duke of Bedford, as firſt commiſſioner of the admiralty, and the other lords of that board unanimouſly, and with pleaſure granted the contents of my memorial; nobly adding, that they were not at war with the arts and ſciences or their profeſſors, that the Engliſh nation cultivated them; and it was the glory of its miniſters and great men to protect and encourage them. In the ſame generous ſtrain ran all the anſwers with which the admiralty were pleaſed to honour me with, by their ſecretary Mr. Corbet; and this condeſcenſion put into my hands an opportunity of ſoliciting ſeveral favours to the great relief of the Spaniſh priſoners who were in Fareham hoſpital, and the common priſon, beſides ſome perſonal favours for myſelf. The worthy Mr. Brookes, ſoon after my arrival, had offered to procure me a warrant for going over to France in a packet-boat, which was to carry over to St. Malo the Louiſbourg captives. But I could not think of going out of England and leaving my papers behind me.

THE inſurrection in Scotland induced the admiralty to iſſue orders, that all priſoners who were upon leave in London, ſhould immediately repair to ſome diſtant places; tho' in this no more was meant than their own ſecurity, leſt in the preſent commotions the people ſhould riſe upon them being Roman catholics, the ſovereigns of which religion were judged to foment the rebellion. On this I laid aſide all thoughts of ſoliciting leave to go to London, tho' I was not inſenſible that my affairs required my perſonal attendance there. Thus I was obliged to wait till the agitation of the court ſubſided; for as by their importance they neceſſarily took up the attention of all the perſons at the helm, a conſiderable time naturally elapſed, before I had the pleaſure of ſeeing the accompliſhment of the admiralty's promiſes relating to my papers.

It was not long before the ſcale was turned by the great levies of troops in England, and the tranſportation of others from Flanders to act againſt thoſe of the pretender, whoſe ſon having ſuſtained a defeat, and being deſtitute of all reſource, was obliged to withdraw from the kingdom. On this the perturbations in the minds of the people ſubſided; and the miniſtry ſeemed to be more at leiſure for attending to private affairs.

This revived my thoughts of forwarding my affairs, by a perſonal ſollicitation at London. I found no difficulty in obtaining the uſual permiſſion, and had the pleaſure of performing the journey in company with Mr. Brookes, whom buſineſs called to that capital, where we arrived on the 12th of April.

On my firſt attendance at the office for priſoners of war, an order was ſhewn me from my lord Harrington, ſecretary of ſtate, for bringing me to his houſe. This nobleman having been ambaſſador for ſome years in Spain, among his other eminent qualities had a great affection for the Spaniards, which he was pleaſed to extend to me in a moſt obliging reception and aſſurances, that nothing ſhould be wanting in him to procure me my papers, or do me any other good offices.

Martin Folkes, Eſq; preſident of the Royal Society of London, a perſon equally diſtinguiſhed for his learning, politeneſs and readineſs to do every good action in his power, being informed I was a priſoner at Fareham, and that my papers were lodged at the admiralty; and fearing they might fall into the hands of perſons entirely ignorant of their contents, and by that means be miſlaid or abuſed, had applied for having them delivered to himſelf; alledging, that as the ſubject of them related to the ſciences, none could be fitter for them than the ſociety. But as they were unhappily mingled with many others of a very different kind taken at the ſame time, it was difficult to ſeparate them without the preſence of the author himſelf, to diſtinguiſh them by the hand and other marks. By his aſſiſtance and the alacrity of Mr. Brookes, who was determined not to give himſelf any reſt till the affair was ended to my ſatisfaction, an order of the admiralty was obtained to the ſecretary of the India company, to whom they had all been ſent, that I might make a ſearch for them, and thoſe which I ſhould ſeparate were to be ſent to the admiralty. This order met with ſuch a punctual compliance, that it was executed the very day of its date.

The preſident of the Royal Society, for whom all the lords of the admiralty entertained an eſteem ſuitable to his great merit, was again pleaſed to intereſt himſelf in behalf of my papers; and in regard to his ſolicitations the examination of them was referred to himſelf. This gentleman, who poſſeſſed in the higheſt degree all the ſocial and intellectual qualities, affability without artifice, a genius which nothing could eſcape, an amiable deportment, and generous manners, had from my firſt arrival ſhewn me great kindneſs; he introduced me to the meetings of the ſociety: and thus to him I owe the acquaintance of many perſons of diſtinction, and the marks of friendſhip I received from them. He condeſcended to carry me to the moſt famous muſeums, places of delight to a rational curioſity, where all nature is collected into a living hiſtory of the ſeveral products of the waters and earth, both in the mineral, vegetable and animal kingdoms. He further brought me acquainted with ſeveral of the moſt diſtinguiſhed literati: and carried his friendſhip very far beyond any thing I could have expected.

The recommendation of ſo diſtinguiſhed a perſon, to whoſe judgment ſo much deference was paid in all things, together with the honour of having been one of the two appointed for meaſuring the degrees of the earth in Peru, had ſuch an influence on the patrons of ſcience, that I ſhould wrong them did I not acknowledge, that to them I chiefly owe the happineſs of recovering my papers, my liberty, and the polite treatment ſeveral perſons of rank and quality were pleaſed to ſhew me.

Actions like theſe convinced me of the ſincerity of the Engliſh, their candor, their benevolence and diſintereſted complaiſance. I obſerved the tempers, inclinations, particular cuſtoms, government, conſtitution and policy of this praiſe-worthy nation, which, in its œconomical conduct and ſocial virtues, may be a pattern to thoſe who boaſt of ſuperior talents, to all the reſt of mankind.

Mr. Folkes having gone through my papers, made his report to the admiralty; and ſo much in my favour, that were I to inſert it here, it would be the moſt honourable teſtimonial of our work; and that board being thoroughly ſatisfied, gave him leave, according to his deſire, to deliver them up to me; which he did on the 25th of May. But as a more illuſtrious teſtimony of the great eſteem with which he honoured me, he propoſed to Earl Stanhope and ſeveral other gentlemen of the Royal Society, that I might be admitted a member of that learned body, rightly judging that ſuch an honour could not fail of adding an ardour to my deſire of contributing to the improvement of the ſciences. Having thus happily finiſhed my affairs, and obtained my liberty at the firſt ſolicitation for it, I embarked at Falmouth in the Liſbon packet boat; my predominant inclination now being to ſee my native country, after ſuch a variety of adventures. On my ſafe arrival at Liſbon, I haſtened to Madrid, which I reached on the 25th of July 1746; eleven years and two months after my embarkation at Cadiz on this commiſſion.

I found Spain in mourning for the loſs of its late excellent ſovereign Philip V. who had paſſed to a better ſtate, on the 9th of the ſame month. My firſt care was to wait upon the marquis de la Enſenada, ſecretary of ſtate, with my papers, that he might lay them before his majeſty; whom God long preſerve. His majeſty was pleaſed to order that theſe papers ſhould be publiſhed under his patronage; a declaration truly becoming a prince, who, to all the eſtimable qualities of a king and a man, has added a love for the ſciences.

Thus have we concluded a work, which has been long expected by all nations. Its importance entitled it to the encouragement of the greateſt monarchs; and the length of time employed in it, has kept in an impatient ſuſpenſe, the learned of Europe.

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